

For BoCC Public Hearing, 12.8.2020

Thurston County

Capital Improvement Program 2021-2026

Appendix G

Adoption _____, 2020

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CHAPTER 1 - INTRODUCTION

The Growth Management Act (GMA) requires Thurston County to maintain a capital facilities element. The Comprehensive Plan includes the 20-year capital facilities plan goals, policies, and objectives, and additional comprehensive plan chapters address specific types of capital facilities and levels of service (see especially Chapters 2, 5, 6, and 7). This Appendix serves as the 6-year financing plan required by GMA (RCW 36.70A.070(3)(d)) for capital facilities necessary to support growth as anticipated in the land use element (Chapter 2). This 6-year plan is called the Capital Improvement Program (CIP).

The capital facilities covered by this CIP are primarily those owned or managed by Thurston County government necessary to support growth and development. A summary of the facilities provided by other government entities to support planned growth is also provided. For purposes of the CIP, capital facilities are defined as those projects anticipated to cost \$100,000 or more, with a 10-year life cycle, and anything funded with real estate excise tax (REET) funds or impact fees.

Capital facilities provided by cities, including the extension of water and sewer systems to unincorporated urban growth areas adjacent to the cities, are found in joint plans with cities in Thurston County. The portions of joint plans that apply to unincorporated urban growth areas are adopted by both the applicable city and Thurston County.

Planning for capital facilities is a complex task carried out by each department of the County. It requires an understanding of current conditions relative to future needs, an assessment of various types of capital facilities that could be provided, analysis to identify the most effective and efficient facilities to support the needed service and addressing how these facilities will be financed. This CIP is the product of separate but coordinated planning efforts, each focusing on a specific category of facilities.

The CIP is a planning document. It is not a budget for expenditures, nor a guarantee that the projects will be implemented. It assumes receipt of outside grant resources, and if grants are not received, projects may be delayed or removed. Each capital project listed in the CIP will need to go through a separate environmental review and approval process.

The CIP includes a six-year capital construction and investment program for specific projects. It also includes purchases for public facilities and services by the County. The CIP specifies revenues that will include such capital facilities within projected funding capacities. Part of the function of the CIP is to clearly identify the sources of public money for such purposes. The CIP incorporates by reference annual Transportation Improvement Program and its supporting documents. This plan fulfills the county's financial planning responsibilities under the GMA which covers a six-year period, the years 2021-2026. Transportation grants typically require a six-year plan, and this period is one in which the County can address its immediate capital needs.

Summary of revenue sources and expenditures

The following tables provide a summary of the sources of funds for capital projects found in this CIP, by county department, and estimated expenditures over the next six-year planning period.

Table 1-1 Summary by Revenue Source

Revenue Sources	Parks and Open Space	Solid Waste	Storm and Surface Water Utility	Water and Sewer Utility	Transportation	County Buildings	Totals by Revenue Source
Existing Revenues							
Central Services Building Reserve						\$6,882,000	\$6,882,000
Grants Committed					\$14,072,143	\$1,500,000	\$15,572,143
Other, Federal/State/Local Agency					\$19,574,854		\$19,574,854
Parks Impact Fees	\$2,955,750				\$10,000		\$2,965,750
Real Estate Excise Tax	\$1,744,250			\$3,443,914	\$18,266,000	\$39,650,000	\$63,104,164
Road Fund					\$34,559,930	\$1,335,000	\$35,894,930
Solid Waste Tipping Fees, Rates and Charges		\$24,043,454					\$24,043,454
Stormwater Utility Rates			\$8,758,685				\$8,758,685
Transportation Impact Fees					\$3,309,000		\$3,309,000
Trial Court Improvement Fund						\$1,300,000	\$1,300,000
Utility Revenue				\$7,951,086			\$7,951,086
Existing Revenues Totals	\$4,700,000	\$24,043,454	\$8,758,685	\$11,395,000	\$89,791,927	\$50,667,000	\$189,356,066

Revenue Sources	Parks and Open Space	Solid Waste	Storm and Surface Water Utility	Water and Sewer Utility	Transportation	County Buildings	Totals by Revenue Source
Proposed New Revenues or Increased Rates							
Bonds - Future						\$56,500,000	\$56,500,000
Utility Loans/Grants				\$240,000			\$240,000
Proposed Totals	\$0	\$0	\$0	\$240,000	\$0	\$56,500,000	\$56,740,000

REVENUE TOTALS	\$4,700,000	\$24,043,454	\$8,758,685	\$11,635,000	\$89,791,927	\$107,167,000	\$246,096,066
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Table 1-2 Summary by Division and Year

Divisions	2021	2022	2023	2024	2025	2026	Total	% of Total Cost (rounded)
Parks	\$2,175,000	\$1,527,500	\$687,500	\$185,000	\$75,000	\$50,000	\$4,700,000	2%
Solid Waste	\$4,993,434	\$650,000	\$4,720,000	\$7,290,000	\$5,350,000	\$1,100,000	\$24,043,434	10%
Storm & Surface Water	\$2,488,685	\$3,195,000	\$947,000	\$1,479,000	\$599,000	\$50,000	\$8,758,685	4%
Transportation	\$21,055,927	\$12,507,000	\$23,351,000	\$13,834,000	\$10,874,000	\$8,170,000	\$89,791,927	37%
Water & Sewer	\$1,412,000	\$3,201,000	\$2,659,000	\$1,557,000	\$1,506,000	\$1,290,000	\$11,635,000	5%
General Government Facilities	\$8,507,000	\$22,160,000	\$51,800,000	\$800,000	\$1,900,000	\$21,900,000	\$107,167,000	44%
Total	\$40,632,046	\$43,240,500	\$84,164,500	\$25,304,000	\$25,145,000	\$32,560,000	\$246,096,066	100.00%

CHAPTER 2 – COUNTY PARKS, RECREATION AND OPEN SPACE

The inventory of County Parks, trails, open space and preserve area is 2,578 acres. This inventory is shown in table 2-1.

Table 2-1 Existing Parks and Trails Inventory

Facility Name	Location	Capacity or size
ACTIVE REGIONAL PARKS		
Deschutes Falls	SE	155 Acres
Kenneydell	SW	18 Acres 22 Acres Addition
Burfoot	NW	60 Acres
Frye	NW	86 Acres
Guerin	NW	40 Acres
OPEN SPACE/UNDEVELOPED PARK SITES		
Rainier View Park	SE	54 Acres
Ruth Prairie Park	SE	35 Acres
Louise H. Meyers Park	NW	38 Acres
Deschutes River Park	SE	50 Acres
Lake Lawrence Park	SE	15 Acres
Indian Road Park	NE	5 Acres
Cooper Point Park	NW	32 Acres
PRESERVES		
Glacial Heritage Preserve	SW	1,020 Acres
Woodland Creek Wetlands	NE	75 Acres
Johnson Point Wetlands	NE	26 Acres
Black River Natural Area	SW	13 Acres
SPECIAL USE PARKS		
Off-Leash Dog Park	NE	5 Acres
TRAILS		
Chehalis Western Trail	NE-SE	182 Acres (26 trail miles)
<i>Chehalis Western (Vail Loop Trailhead)</i>	<i>SE</i>	<i>Included in trail acreage</i>

<i>Chambers Lake Trailhead</i>	<i>NE</i>	<i>Included in trail acreage</i>
<i>67th Ave. Trailhead</i>	<i>NE</i>	<i>Included in trail acreage</i>
<i>Fir Tree Road Trailhead</i>	<i>SE</i>	<i>Included in trail acreage</i>
<i>Smith Lake</i>	<i>NE</i>	<i>Included in trail acreage</i>
Yelm – Tenino Trail	SE	400 Acres (14.5 trail miles)
<i>Yelm Center Trailhead</i>	<i>SE</i>	<i>Included in trail acreage</i>
<i>Tenino Park Trailhead</i>	<i>SW</i>	<i>Included in trail acreage</i>
<i>Rainier Trailhead</i>	<i>SE</i>	<i>Included in trail acreage</i>
Gate-Belmore Trail (unimproved)	NW-SW	243 Acres (14 trail miles)
Ralph Munro Trail	NW	- - (1.5 trail miles)
HISTORIC SITES		
Mima Cemetery	SW	2 Acres
Ft. Eaton Monument	SE	1 Acres
George Washington Bush Monument	SE	1 Acres

Future Needs

Currently there are about 972 acres of developed and operational parkland and trails, designed to meet the level of service for parks, recreation and open space as stated in Chapter 9 of the Thurston County Comprehensive Plan Thurston County. Additional lands needed over the 20-year planning period for the comprehensive plan is approximately 210 acres. Land acquisition and park and trail development proposed in the six-year planning period as described in Table 2-2 will assure the adequate level of service is maintained to address the needs and demands of the growing population.

Proposed Improvements

Parkland and trail improvement projects and associated facilities, totaling about \$4.4 million, are proposed over the six-year planning period. These costs would be paid for by parks impact fees and real estate excise tax funds as shown in the Table 2-2.

Table 2-2: Public Works- Parks and Open Space Project Funding

REVENUES FOR PROJECTS							
Fund Source	2021	2022	2023	2024	2025	2026	6-Yr. Total
Real Estate Excise Tax	\$701,750	\$621,875	\$253,375	\$89,750	\$51,250	\$26,250	\$1,744,250
Park Impact Fees	\$1,473,250	\$905,625	\$434,125	\$95,250	\$23,750	\$23,750	\$2,955,750
TOTALS	\$2,175,000	\$1,527,500	\$687,500	\$185,000	\$75,000	\$50,000	\$4,700,000

EXPENDITURES FOR PROJECTS									
Project Name	Fund Source	Urban Growth Area	2021	2022	2023	2024	2025	2026	6-Yr. Total
Yelm Tenino Trail - Deschutes River Trestle Repair (sub-structure)	REET	Rural Thurston County	\$5,000						\$5,000
Burfoot Trail System - Footbridge/Stairway	REET	Rural Thurston County	\$5,000						\$5,000
Deschutes Falls Park Walkway and View Point Improvements	PIF/REET	Rural Thurston County	\$550,000						\$550,000
Burfoot Park Restroom Replacement	PIF/REET	Rural Thurston County	\$1,100,000						\$1,100,000
Yelm-Tenino Trail Restroom - Rainier	PIF/REET	Rural Thurston County		\$150,000	\$550,000				\$700,000
Chehalis Western Trail - Culvert Replacement (Chehalis Trail-near Latigo St.)	REET	Rural Thurston County	\$50,000	\$150,000					\$200,000
Burfoot Park - Level and Grade Lawn Area	REET	Rural Thurston County		\$25,000	\$25,000	\$25,000	\$25,000		\$100,000
Chehalis Western Trail - 41st Avenue NE Trailhead	PIF/REET	Rural Thurston County	\$55,000	\$440,000	\$10,000				\$505,000

Appendix G – Six Year Capital Improvement Program 2021-2026

Kenneydell Park - Restroom Replacement	PIF/REET	Rural Thurston County	\$55,000	\$660,000					\$715,000
Deschutes Falls Park - Parking Expansion	PIF/REET	Rural Thurston County		\$27,500	\$27,500	\$110,000			\$165,000
Frye Cove Park - Lawn Renovation	REET	Rural Thurston County		\$25,000	\$25,000				\$50,000
Parks & Trails Asset Management Implementation	REET	Rural Thurston County	\$5,000						\$5,000
Yelm-Tenino Trail / City of Rainier – Recreation Courts Park Improvements	PIF	Rural Thurston County	\$300,000						\$300,000
Parks, Trails and Open Space Acquisition 2021-2022 Program	PIF/REET	Countywide	\$25,000	\$25,000					\$50,000
Parks, Trails and Open Space Acquisition 2023-2026 Program	PIF/REET	Countywide			\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
Parks Improvements and Development 2021-2022 Program	PIF/REET	Countywide	\$25,000	\$25,000					\$50,000
Parks Improvements and Development 2023-2026 Program	PIF/REET	Countywide			\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
TOTALS			\$2,175,000	\$1,527,500	\$687,500	\$185,000	\$75,000	\$50,000	\$4,700,000

Legend:

REET-Real Estate Excise Tax Second Quarter Funds

PIF-Park Impact Fees

Light grey shading, normal font - closeout project

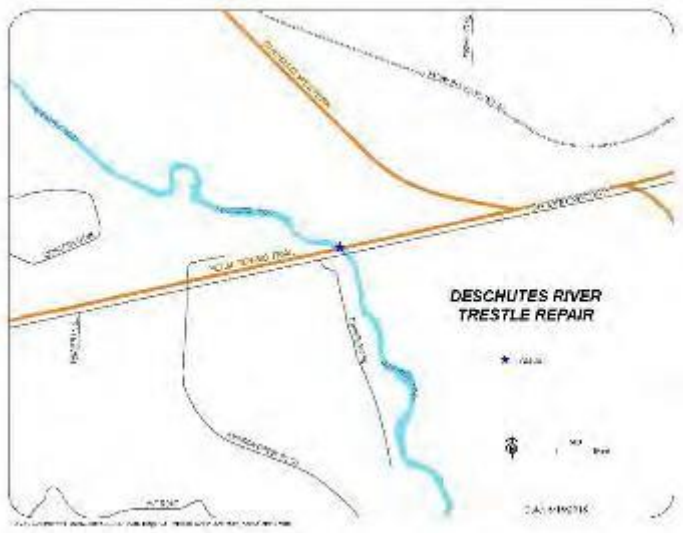
Medium grey shading, bold font - construction project

Black shading, white font - engineering project

Completed

Chehalis Western Trail - BNSF Bridge -
Talcott Ridge Dr crossing (Lacey UGA)

YELM-TENINO TRAIL – DESCHUTES RIVER TRESTLE REPAIR



DESCRIPTION: Project includes the replacement of piles/posts that hold up the 270' trestle that spans the Deschutes River as part of the Yelm-Tenino Trail. This project represents Phase 2 of the restoration of this bridge structure. Phase 1 included the replacement/renovation of the top side of the structure in 2018.

LOCATION: Southern Thurston County where the Yelm-Tenino Trail crosses the Deschutes River.

JUSTIFICATION (Need/Demand): This trestle is located roughly in the middle of the 14- mile Yelm-Tenino Trail. The structure is in disrepair and renovation was begun in 2018.

IMPLICATION OF NOT DOING THE PROJECT: A continuation in the degradation of the structure.

LINKS TO OTHER PROJECTS OR FACILITIES: Links the rural cities of Yelm and Tenino.

BURFOOT TRAIL SYSTEM FOOTBRIDGE/STAIRWAY



DESCRIPTION: The existing trail system includes many footbridges and stairways. The bridges/stairways have exceeded their life expectancy and are in need of replacement. This project will pay for materials and labor needed to rebuild/replace the failing infrastructure.

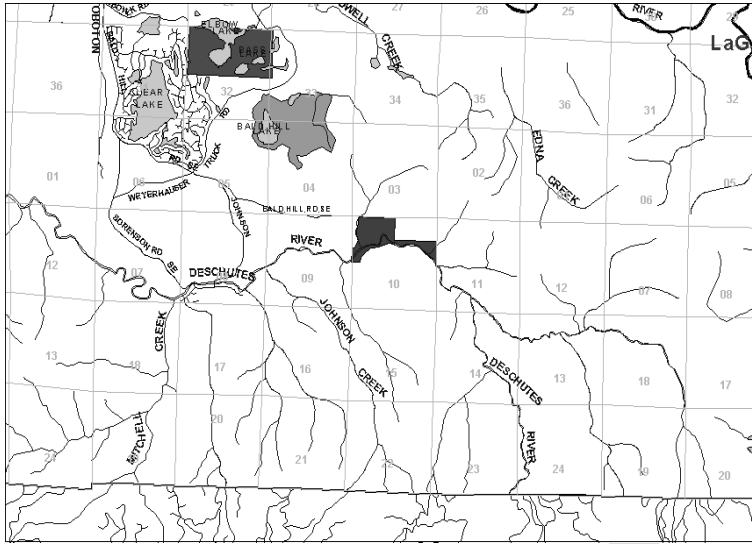
LOCATION: 6927 Boston Harbor Rd

JUSTIFICATION (Need/Demand): Burfoot Park is a heavily used facility. The main attraction of the park is the access to Puget sound/Budd Inlet. The trails, stairways, and bridges provide the connection from the main body and parking of the park to the shoreline. The bridges and stairways are wooden structures have deteriorated to a point that they do not serve the volume of people who use this facility.

IMPLICATION OF NOT DOING THE PROJECT: Additional maintenance will continue to be required to keep the trails operational.

LINKS TO OTHER PROJECTS OR FACILITIES: Boston Harbor Boat Launch

DESCHUTES FALLS PARK - WALKWAY AND VIEWPOINT IMPROVEMENTS



DESCRIPTION: Improvements include the addition of a viewpoint deck platform overlooking the falls. Improvement will also be made to the paths approaching the viewpoint.

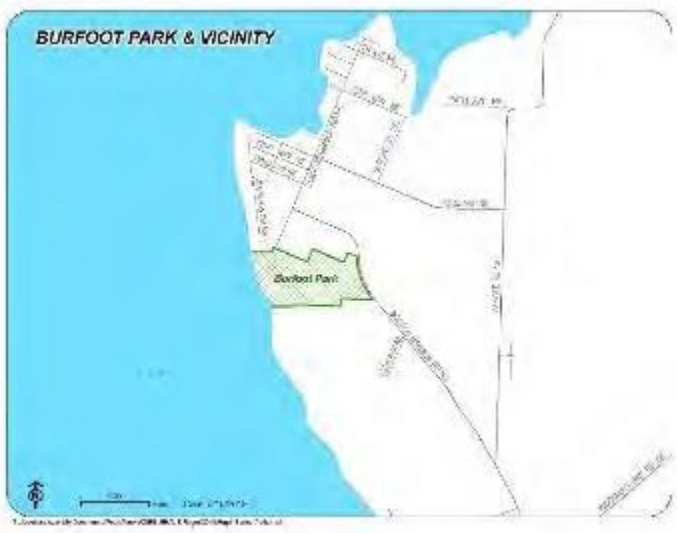
LOCATION: Approximately 15 miles from Yelm at the end of Bald Hills Road in southeastern part of county.

JUSTIFICATION (Need/Demand): This is the largest publicly owned piece of recreational property in the southeastern part of the county. There is a high demand for park facilities in this section of the county. There is also a high demand for public use of this particular site. With its pristine natural environment, this site is one of the county's most valuable park assets. Current conditions include a large mud area at the viewpoint and approaching trails. The mud surface is not ideal for users and negatively impacts the environment as the mud area alters native vegetation and water run-off.

IMPLICATION OF NOT DOING THE PROJECT: User experience and natural environment continue to be negatively impacted.

LINKS TO OTHER PROJECTS OR FACILITIES: Not directly linked to other county or state park projects. Close proximity to the Weyerhaeuser properties opened for public recreational use. Adjacent to Department of Natural Resources Bald Hills Preserve.

BURFOOT PARK RESTROOM REPLACEMENT



DESCRIPTION: The existing restroom was built in 1977 and has exceeded its life expectancy. The project includes the removal of the existing restroom and replacing it with a larger, more energy efficient building, increasing capacity and reducing the amount of required maintenance. Also included is the addition of a smaller, second restroom located near the playground.

LOCATION: 6927 Boston Harbor Rd.

JUSTIFICATION (Need/Demand):

The existing restroom does not have the capacity to serve the current need. The addition of the second restroom will allow children to use the restroom in a way that does not require them to cross a three-acre lawn and be removed from the parent's sight, and will help to serve the needed capacity during the peak season.

IMPLICATION OF NOT DOING THE PROJECT: Additional maintenance will continue to be required to keep the restroom operational. The park rents out picnic facilities which provides revenue. The restroom needs to be able to serve these uses or the risk of losing revenue.

LINKS TO OTHER PROJECTS OR FACILITIES: Boston Harbor Boat Launch

YELM – TENINO TRAIL RESTROOM – RAINIER



DESCRIPTION: Install a new restroom building in Rainier near the City-owned Wikowski Park to replace an outdated portable building currently used for City Park reservations. The new restroom will serve both the Yelm-Tenino Trail users and Wikowski Park. The restroom will be maintained by City of Rainier staff.

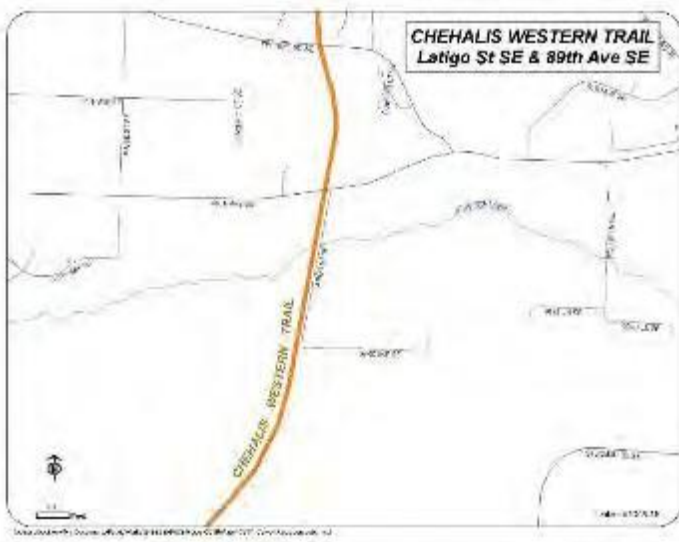
LOCATION: City of Rainier.

JUSTIFICATION: The existing restroom is not operational most of the year as it is well beyond any reasonable life expectancy. The 14-mile Yelm-Tenino Trail has restroom access at both ends, but nothing for the 14-mile stretch in between. Rainier is located half-way between Tenino and Yelm, making it a strategic location.

IMPLICATION OF NOT DOING THE PROJECT(S): Restrooms are not available for a span of almost 14 miles. The existing portable building is not able to be opened due to the deteriorated condition.

LINKS TO OTHER PROJECTS OR FACILITIES: Links the rural Cities of Yelm, Rainier, Tenino and Bucoda in the future. Connects with the County-owned Chehalis Western Trail. Connects urban and rural communities, businesses, schools, residences, park facilities, and other valuable assets. Links with proposed park sites at McIntosh Lake, the Deschutes River, and other county and city park sites.

CHEHALIS WESTERN TRAIL - CULVERT REPLACEMENT



DESCRIPTION: Many of the County parks/trails culverts are reaching, or have exceeded, their life expectancy and need replacement. The existing failing culverts impact fish passage and do not meet the existing NPDES standards.

LOCATION: Chehalis Western Trail
near Latigo St SE.

JUSTIFICATION: (Need/Demand): As culverts approach their life expectancy and begin to degrade, they must be prioritized for substantial repair or replacement.

IMPLICATION OF NOT DOING THE PROJECT(S): Continued deterioration of trail culverts. Negative impact to fish passage.

LINKS TO OTHER PROJECTS OR FACILITIES: Links the rural Cities of Yelm, Rainier, Tenino and Bucoda in the future. Connects with the County-owned Chehalis Western Trail. Connects urban and rural communities, businesses, schools, residences, park facilities, and other valuable assets. Links with proposed park sites at McIntosh Lake, the Deschutes River, and other county and city park sites.

BURFOOT PARK – LEVEL AND GRADE LAWN AREA



DESCRIPTION: Project includes the re-grading of a three- acre lawn area. This project requires the soil to be leveled, re-graded, and re-seeded. This project will reduce the amount maintenance time needed and will make the area more usable for the public for recreational activities.

LOCATION: 6927 Boston Harbor Rd.

JUSTIFICATION (Need/Demand): Burfoot Park is a very popular destination for the citizens and visitors to the region. The lawn was installed in 1977 and has settled into a series of depressions that increase the time required for maintenance of the site and lowers the life expectancy of the machinery. Park visitor experience is negatively impacted as the un-even soils limit use.

IMPLICATION OF NOT DOING THE PROJECT: Increased time to perform maintenance and higher replacement cost for machinery.

LINKS TO OTHER PROJECTS OR FACILITIES: Boston Harbor Boat Launch

CHEHALIS WESTERN TRAIL – 41st AVE NE TRAILHEAD



DESCRIPTION: Project includes creating a ±29 stall parking area for the Chehalis Western trail. Includes constructing an asphalt parking surface, drainage structure, and installation of informational signage.

LOCATION: Near the intersection of the Chehalis Western Trail and 41st Ave NE.

JUSTIFICATION: (Need/Demand): This project would allow for vehicles to park in a safe manner as opposed to parking adjacent to the right-of-way. Addresses the need to add designated parking areas for trail use.

IMPLICATION OF NOT DOING THE PROJECT: Continued congestion with parking adjacent to the right-of-way.

LINKS TO OTHER PROJECTS OR FACILITIES: Links the rural Cities of Yelm, Rainier, Tenino and Bucoda in the future. Connects with the County-owned Chehalis Western Trail. Connects urban and rural communities, businesses, schools, residences, park facilities, and other valuable assets. Links with proposed park sites at McIntosh Lake, the Deschutes River, and other county and city park sites.

KENNEYDELL PARK – RESTROOM REPLACEMENT



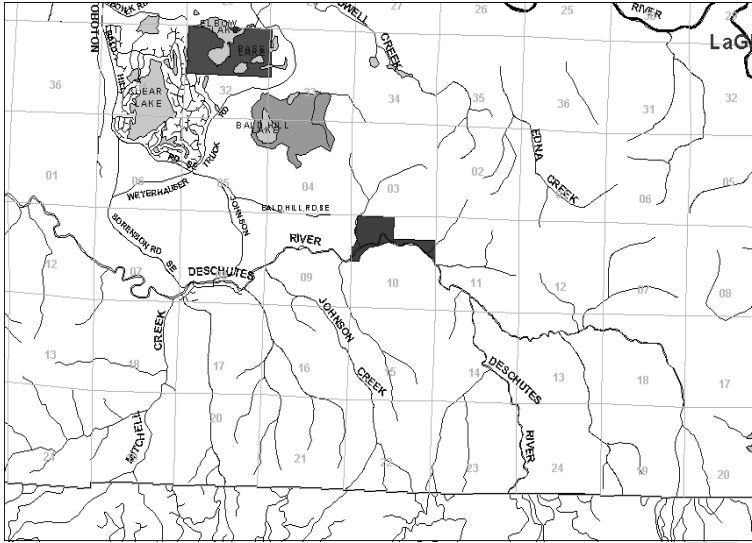
DESCRIPTION: Project replaces the existing restroom located adjacent to the Lodge Building. The existing building was in place when the County purchased the property in 1988. The age of the structure is unknown but estimated to be approximately 50 years old.

LOCATION: Kenneydell Park 6745 Fairview Rd SW

JUSTIFICATION (Need/Demand): The existing restroom is configured in a way that does not meet current ADA conditions. The building is essentially facing backwards now that its main function is to serve the lodge. General items such as toilets, sinks, stalls, heat, and plumbing are all beyond their life expectancy. The new restroom will address additional capacity with an additional number of stalls and will become ADA compliant.

IMPLICATION OF NOT DOING THE PROJECT: A continuation in the degradation of the structure. Continue to be non-compliant with the ADA requirements

LINKS TO OTHER PROJECTS OR FACILITIES: Will link with the currently un-developed Gate-Belmore Trail

DESCHUTES FALLS PARK – PARKING LOT EXPANSION

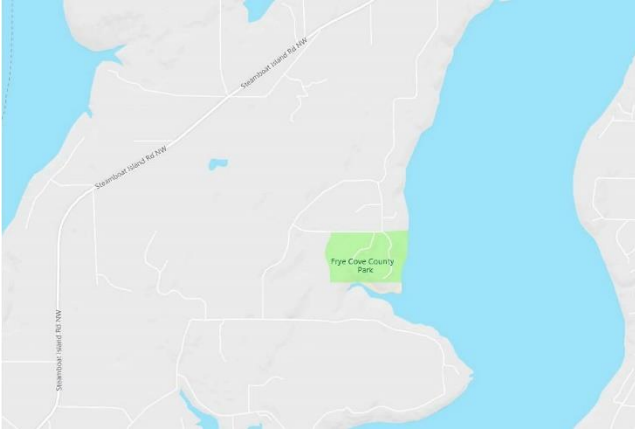
DESCRIPTION: Project adds to the existing parking area at the site. The existing parking lot does not have adequate parking spaces to serve the need.

LOCATION: Deschutes Falls Park. 25005 SE Bald Hills Rd

JUSTIFICATION (Need/Demand): The existing parking lot does not provide adequate parking spaces for park users during the summer months. Many vehicles are currently required to park on Bald Hills Road, adjacent to the site, to access the park. New parking spaces will address capacity by allowing more users to park safely inside the park.

IMPLICATION OF NOT DOING THE PROJECT: Vehicles continuing to park on Bald Hills Road presenting possible safety issues and reducing visitors to the park.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

FRYE COVE – LAWN RENOVATION

DESCRIPTION: Project addresses an issue of safety, aesthetics, and maintenance efficiency. The existing lawn has been settling in a way that produces large “sinkholes”. The fill, over which the lawn was placed, is comprised of concrete rubble and has many voids. This project will over-excavate the lawn area, remove or reposition the concrete pieces, and replace and grade the soils.

LOCATION: Frye Cove park 4000 NW 61st Ave

JUSTIFICATION (Need/Demand): The completed project will provide for a safer public area, improve the aesthetics, and reduce maintenance time.

IMPLICATION OF NOT DOING THE PROJECT: More sinkholes may develop making the area less safe and continue to take additional maintenance time to repair.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

YELM-TENINO TRAIL / CITY OF RAINIER – RECREATIONAL COURTS PARK IMPROVEMENTS



DESCRIPTION: Install a tennis court and a pickleball court in Rainier in the City-owned Wikowski Park area near the Yelm-Tenino trailhead. The facilities will be maintained by City of Rainier staff.

LOCATION: City of Rainier.

JUSTIFICATION: These recreational courts will serve visitors to both the park and the trailhead. This area is located half-way between Tenino and Yelm, making it a strategic park and recreation location, which will be further enhanced by the planned addition of new restroom facilities.

IMPLICATION OF NOT DOING THE PROJECT(S): Limited availability of and opportunities to use recreation facilities in the area.

LINKS TO OTHER PROJECTS OR FACILITIES: The location of the proposed tennis and pickleball court compliments the planned addition of a restroom at the trailhead near the City of Rainier's Wikowski Park. The Yelm-Tenino Trail links the rural Cities of Yelm, Rainier, Tenino and Bucoda in the future. Connects with the County-owned Chehalis Western Trail. Connects urban and rural communities, businesses, schools, residences, park facilities, and other valuable assets. Links with proposed park sites at McIntosh Lake, the Deschutes River, and other county and city park sites.

PARKS, TRAILS AND OPEN SPACE ACQUISITION PROGRAM

DESCRIPTION: - The Thurston County Comprehensive Parks, Open Space, and Trails Plan defines several goals oriented to preserving open space and natural areas. The focus is on properties that contain special features intended to be used regionally by all residents of the county, inside and/or outside cities

LOCATION: Various locations throughout the county.

JUSTIFICATION (Need/Demand): To allow the county to remain in compliance with the Parks Comprehensive Plan in terms of acreage per 1000 residents and to allow for purchase of properties that may become available with the purchase being time sensitive.

IMPLICATION OF NOT DOING THE PROJECT: Opportunity to purchase unique properties or properties that may be time-sensitive may be lost.

LINKS TO OTHER PROJECTS OR FACILITIES: Varies

PARKS IMPROVEMENTS AND DEVELOPMENT PROGRAM

DESCRIPTION:

Repairs to existing Parks system infrastructure is required to ensure that safe and operation sites are available to the public. Additional capacity is added as needed to keep pace with a consistent increase in the volume of users.

LOCATION: County-wide.

JUSTIFICATION (Need/Demand):

There are life expectancies associated with the infrastructures that make up the County Parks system. Facility Improvements are used to repair/replace existing infrastructures to make sure facilities remain safe, accessible and to add capacity when needed.

IMPLICATION OF NOT DOING THE PROJECT:

Infrastructure failure results in an unsafe condition that puts the County in a position of elevated liability. Repairing a system through proper maintenance is much more cost effective than replacing or repairing due to a failure.

LINKS TO OTHER PROJECTS OR FACILITIES:

Varies depending upon site.

CHAPTER 3 - SOLID WASTE

State law requires each county within the state, in cooperation with various cities and towns within the county, to prepare a coordinated, comprehensive Solid Waste Management Plan. The purpose of this plan is to serve as a guiding document for local governments' solid waste programs, including programs for waste reduction, collection, handling, recycling, and disposal. The plan must also list all existing solid waste management facilities within the participating jurisdictions and outline needs for future facilities that will be required to meet population and waste generation projections (RCW 70.95.080).

An inventory of the solid waste management facilities owned by Thurston County is presented below. These facilities are located at the Waste and Recovery Center (WARC), 2420 Hogum Bay Road NE in Lacey, unless otherwise noted.

Table 3-1 Existing Inventory

Facility Name	Location	Capacity or size
Transfer Station	WARC	Maximum 159 tons per hour <u>or</u> 80 customers per hour
Closed Landfill (formerly Hawks Prairie Landfill)	WARC	N/A
HazoHouse (moderate risk waste facility)	WARC	150 customers per day
Vactor and Street Sweeping Decant Facility	WARC	3,200 square feet
Rainier Drop-Box Facility	Rainier	240 cubic yards per day
Rochester Drop-Box Facility	Rochester	320 cubic yards per day

Future Needs

Thurston County's transfer station receives and manages most of the solid waste generated in the County, as well as a small amount of waste generated in nearby counties. The transfer station, HazoHouse, and two drop-box facilities must serve increasing numbers of customers and corresponding quantities of waste as population increases. The scales and scalehouses associated with the transfer station can accommodate up to about 800 customers per day (based on a 10-hour day) without forming long queue lines that create unacceptable customer wait times and conflicts with traffic movement within the facility. Currently, the scalehouses exceed the peak daily customer count about 20 percent of the time, with the highest customer demand on weekend with counts over 1,200. Based on current and projected population growth in Thurston County and corresponding waste generation rates over the next six years, the transfer station and drop-box facilities will need significant investment to construct those improvements needed to address aging infrastructure and meet service

demand. In addition, the County is obligated to maintain the environmental monitoring systems and other environmental management infrastructure associated with the closed landfill, much of which requires repair or replacement due to obsolescence or damage from differential settlement.

Proposed Improvement Projects

As shown in Table 3-2, repairs and improvements to the closed landfill, transfer station and drop-box facilities totaling a \$24 million are proposed over the six-year planning period. These costs will be paid from solid waste tipping fees and the post closure reserve fund as shown in Table 3-2.

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Table 3-2 Solid Waste Proposed Capital Projects and Funding

REVENUES FOR PROJECTS									
Fund Source			2021	2022	2023	2024	2025	2026	6-Yr. Total
Solid Waste Tipping Fees, Rates and Charges			\$4,933,454	\$650,000	\$4,720,000	\$7,290,000	\$5,350,000	\$1,100,000	\$24,043,454
TOTALS			\$4,933,454	\$650,000	\$4,720,000	\$7,290,000	\$5,350,000	\$1,100,000	\$24,043,454

EXPENDITURES FOR PROJECTS									
Project Name	Fund Source	Urban Growth Area	2021	2022	2023	2024	2025	2025	6-Yr. Total
Sump/Vault Access Hatch and Well Cover Replacement/Retrofit	SWF	City of Lacey	\$10,000						\$10,000
Flare Station	SWF	City of Lacey	\$455,000						\$455,000
SCADA System Replacement	SWF	City of Lacey	\$522,000						\$522,000
Rochester Drop Box - Renovation, Security and Utility Upgrades, and Scale Installation	SWF	Rural Thurston County	\$1,698,227						\$1,698,227
Rainier Drop Box - Renovation, Security and Utility Upgrades, and Scale Installation	SWF	City of Rainier	\$1,698,227						\$1,698,227
Pump Systems Upgrades and Improvements	SWF	City of Lacey			\$3,000,000				\$3,000,000
Security, Technology and Site Improvements	SWF	City of Lacey	\$100,000	\$500,000	\$500,000				\$1,100,000
Transfer Station Operations Facilities Upgrades and Improvements	SWF	City of Lacey	\$50,000	\$50,000		\$190,000			\$290,000
Transfer Station Sort Line Removal	SWF	City of Lacey			\$160,000				\$160,000
Transfer Station Compactor Overhaul and Maintenance	SWF	City of Lacey			\$960,000				\$960,000
Public Tipping Area With New Scales and Scalehouses	SWF	City of Lacey	\$300,000			\$7,000,000			\$7,300,000

New Administrative Operations Facilities	SWF	City of Lacey					\$5,250,000		\$5,250,000
Site Differential Settlement Repairs	SWF	City of Lacey						\$1,000,000	\$1,000,000
General Facilities Renovations and Upgrades Program '21-'22	SWF	City of Lacey / Rural	\$100,000	\$100,000					\$200,000
General Facilities Renovations and Upgrades Program '23-'26	SWF	City of Lacey / Rural			\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
TOTALS			\$4,933,454	\$650,000	\$4,720,000	\$7,290,000	\$5,350,000	\$1,100,000	\$24,043,454

Legend:

SWF - Solid Waste Tipping Fees, Rates, and Charges

Light grey shading, normal font - closeout project

Medium grey shading, bold font - construction project

Black shading, white font - engineering project

Dropped Projects:

Closed Landfill - Completion of Landfill Cover on Southern Slope of 70-Acre Cell

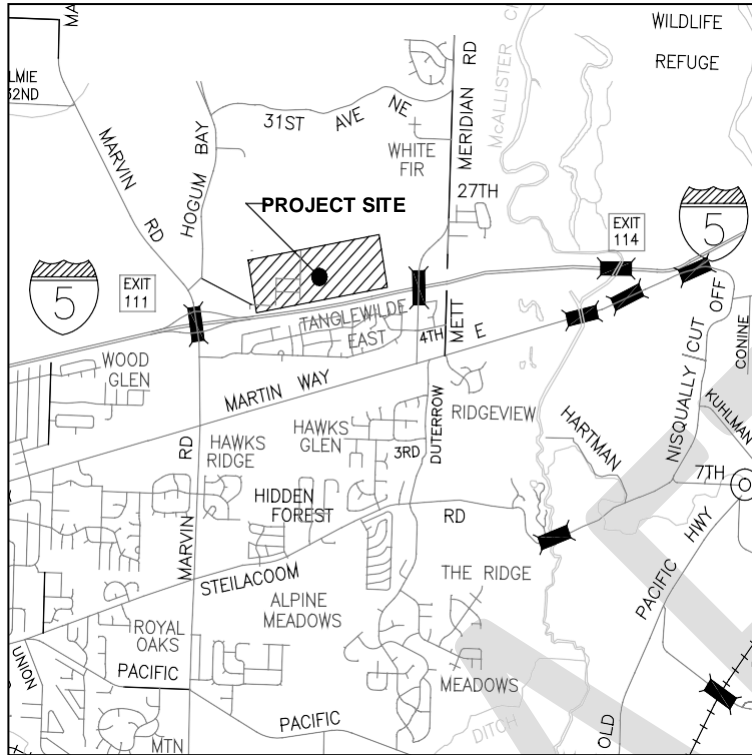
General Stormwater Maintenance & Improvements (included in M&O Fund)

Rainier/Rochester Drop Box Maintenance Program (included in M&O Fund)

Revised Project Timing:

Differential Settlement Repair

Sump/Vault Access Hatch and Well Cover Replacement/Retrofit



DESCRIPTION: Replacement and retrofit of access hatches for the large sumps and vaults associated with the environmental management systems, as well as replacement and retrofit of covers on the landfill's groundwater and gas monitoring wells.

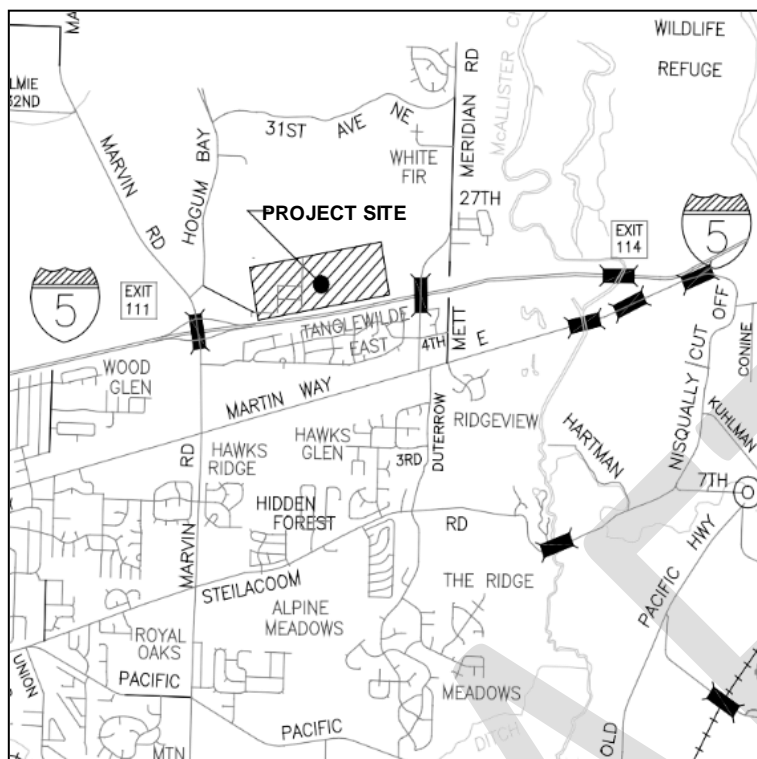
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: The access hatches that cover many of the large below-grade sumps and vaults must be routinely opened for sampling or inspection. These hatches should be replaced with grates and lightweight covers to mitigate the risk of falling and injuries. Covers on the groundwater monitoring and methane gas wells should be replaced or retrofit to prevent stormwater entry and unauthorized access.

IMPLICATION OF NOT DOING THE PROJECT(S): Employees will continue to be at risk of falls and injuries due to the difficulty of opening existing access hatches to below-grade sumps and vaults that are up to 44 inches in diameter and 15 feet deep. In addition, surface water intrusion and security of gas and groundwater monitoring wells will not be addressed.

LINKS TO OTHER PROJECTS OR FACILITIES: None

Flare Station



DESCRIPTION: Replacement of the closed landfill's flare station which is required for methane gas treatment and migration control.

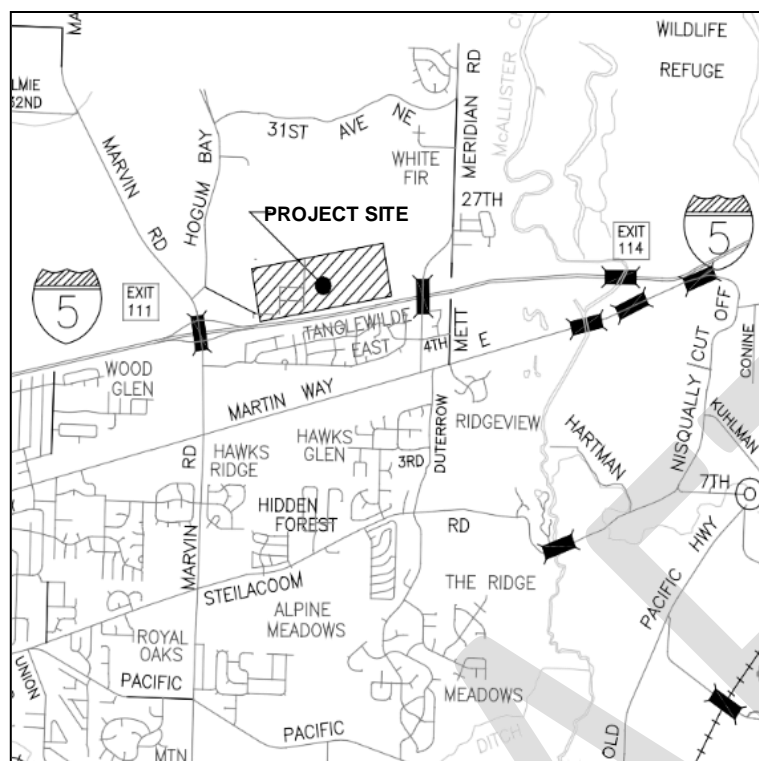
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: The current flare station is oversized, and replacement is required in order to operate at current and projected levels of methane gas within the closed landfill.

IMPLICATION OF NOT DOING THE PROJECT(S): Operation of the existing flare station will fail to meet permit requirements for treatment of methane gas and migration control.

LINKS TO OTHER PROJECTS OR FACILITIES: The closed landfill's SCADA system has failed due to an aged software platform. All environmental systems and pump stations at the site must tie into this platform in order to maintain electronic control and alarm capability. Design and replacement of the SCADA system must be accomplished in parallel with repair and upgrade of these other systems and pump stations.

SCADA System Replacement



DESCRIPTION: Replacement of the closed landfill's electronic control system (SCADA).

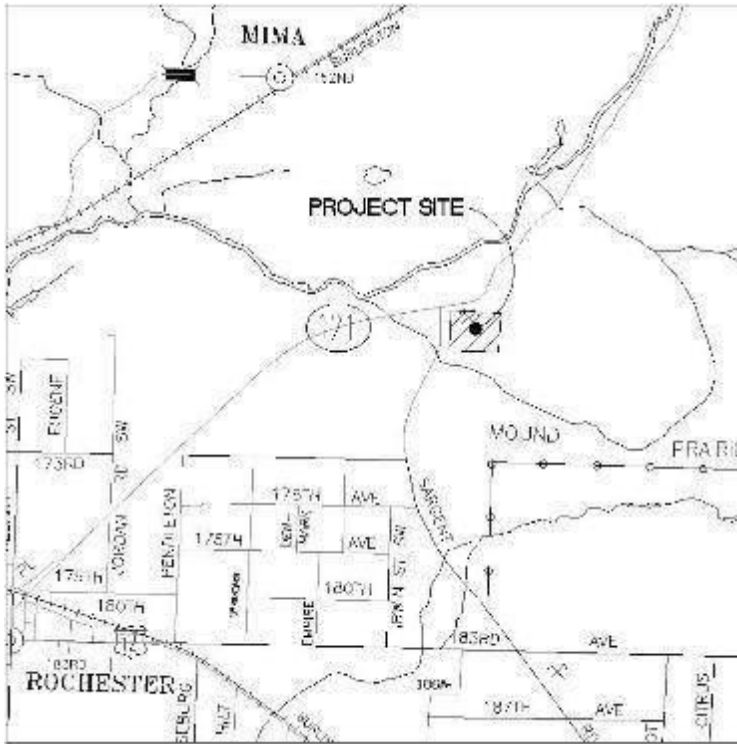
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: The controlling electronic system (SCADA) and associated software that supports the flare and other environmental monitoring systems has failed and must be replaced.

IMPLICATION OF NOT DOING THE PROJECT(S): Operation of the existing flare station will fail to meet permit requirements for treatment of methane gas and migration control.

LINKS TO OTHER PROJECTS OR FACILITIES: The closed landfill's SCADA system has failed due to an aged software platform. All environmental systems and pump stations at the site must tie into this platform in order to maintain electronic control and alarm capability. Design and replacement of the SCADA system must be accomplished in parallel with repair and upgrade of these other systems, including the flare and pump stations.

Rochester Drop-Box–Renovation, Security and Utility Upgrades, and Scale Installation



DESCRIPTION: Renovation of the Rochester Drop-Box Facility to include security and utility upgrades, improved staff facilities, and installation of scales for weighing loads.

LOCATION: 16500 Sargent Road, Rochester

JUSTIFICATION: Infrastructure at the drop-box facility is obsolete and inadequate to meet staffing, operational, and technology needs, as well as increased customer demand. Scales should be installed at the site to improve functionality, accommodate population growth, and ensure full fee recovery.

IMPLICATION OF NOT DOING THE PROJECT(S): Failure to renovate the facility will result in increasing costs for repairs of aging infrastructure, the inability to implement security and technology upgrades, reduced customer service levels, and does not provide adequate facilities for the safety and health of our staff.

LINKS TO OTHER PROJECTS OR FACILITIES: Improvements will be coordinated for cost, effort and resource efficiencies, as well as potential design coordination, with improvements at the Rainier Drop-Box Facility.

Rainier Drop-Box–Renovation, Security and Utility Upgrades, and Scale Installation



DESCRIPTION: Renovation of the Rainier Drop-Box Facility to include security and utility upgrades, improved staff facilities, and installation of scales for weighing loads

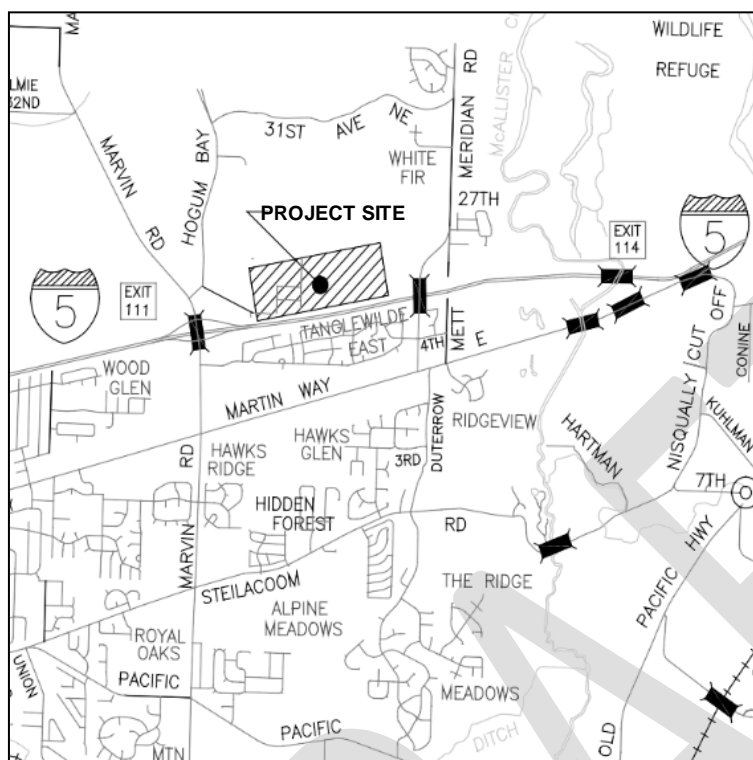
LOCATION: 13010 Rainier Acres Road SE, Rainier

JUSTIFICATION: Infrastructure at the drop-box facility is obsolete and inadequate to meet staffing, operational, and technology needs, as well as increased customer demand. Scales should be installed at the site to improve functionality, accommodate population growth, and ensure full fee recovery.

IMPLICATION OF NOT DOING THE PROJECT(S): Failure to renovate the facility will result in increasing costs for repairs of aging infrastructure, the inability to implement security and technology upgrades, reduced customer service levels, and does not provide adequate facilities for the safety and health of our staff.

LINKS TO OTHER PROJECTS OR FACILITIES: Improvements will be coordinated for cost, effort and resource efficiencies, as well as potential design coordination, with improvements at the Rochester Drop-Box Facility.

Pump Systems Upgrades and Improvements



DESCRIPTION: Projects include repairs and upgrades to:

- Pump station 001 – Leachate Lagoon Outlet to improve function of valve station, configuration, and access, including eliminating need for confined-space entry;
- Pump station 002, which transfers waste water from the transfer station to the main sanitary line;
- Pump station 003 replacement, which transfers combined waste water and leachate off site;
- Stormwater transition pond, which channels stormwater offsite. Adding SCADA control functionality will allow for full pump system integration.

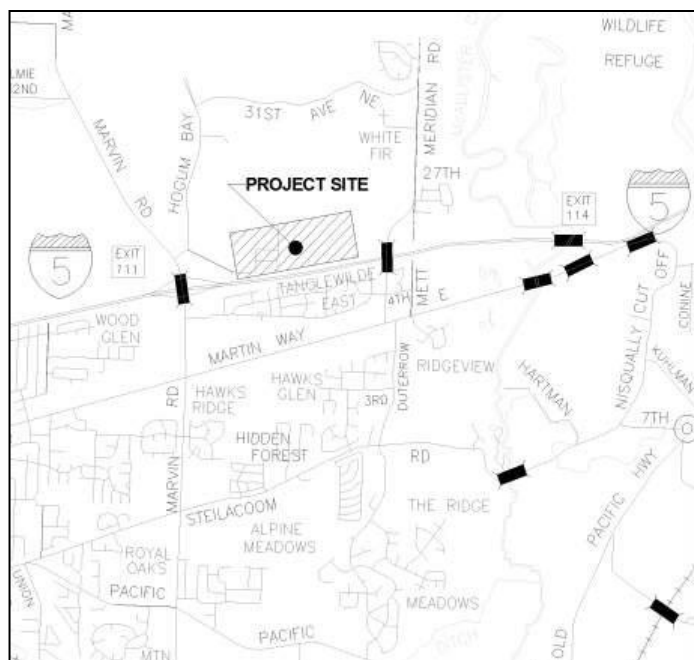
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: All existing pump systems have aging equipment requiring repair or replacement in order to manage waste water, leachate and stormwater effectively, with regular, accessible maintenance and integrated controls. Systems must allow for monitoring and sampling to meet permit requirements.

IMPLICATION OF NOT DOING THE PROJECT(S): Failure to address needed repairs and upgrades will compromise the ability to transfer waste water from the transfer station, stormwater from the transition pond, compromise the ability to control discharge from the leachate lagoon, and maintenance efforts for 001 will continue to require confined-space entry.

LINKS TO OTHER PROJECTS OR FACILITIES: The pump systems improvements and repairs will be linked to the electronic system designed and installed as part of the flare station and SCADA system replacement.

Security, Technology and Electrical Improvements



DESCRIPTION: Improved site security including lighting, cameras, fencing, and access control; technology upgrades to replace obsolete components and replace outdated scale software and accounting software and hardware, improved network infrastructure and connectivity needs; and electrical system upgrades including facility back-up generator systems.

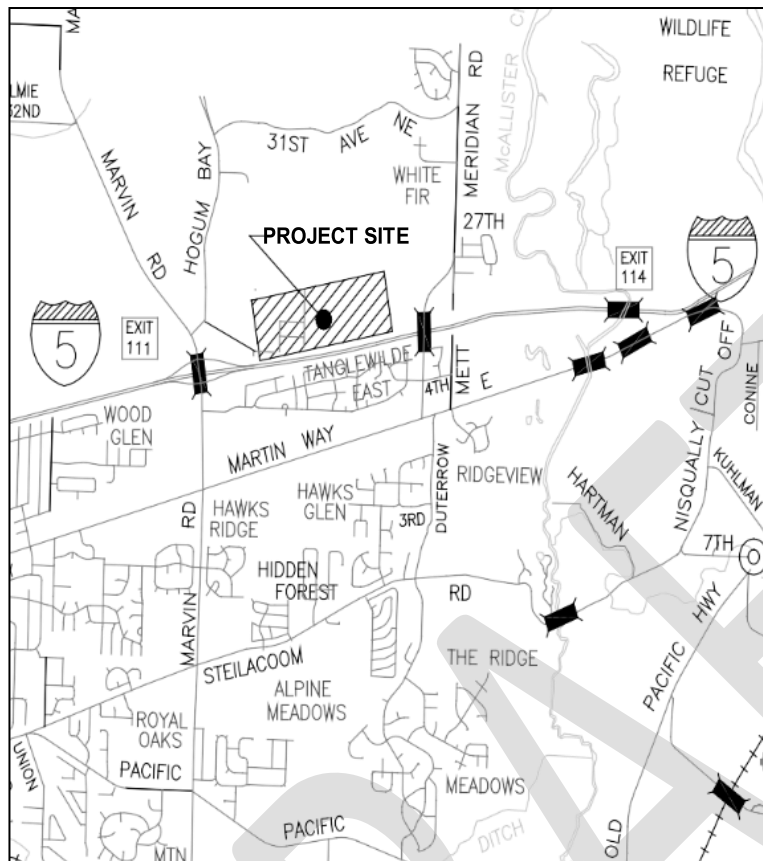
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey (scale software and hardware improvements to also be deployed at Rainier and Rochester Drop-Box Facility sites)

JUSTIFICATION: Much of the infrastructure associated with security and technology is insufficient or obsolete. Improved site security including lighting, cameras, fencing, and access control are required in order to prevent access by unauthorized persons and vehicles when facility is closed. The facility's emergency power back-up systems and communication / network infrastructure require improvements in order to support security and technology upgrades and reduce service disruptions from network and power outages. An upgrade in scale, data reporting and accounting software and hardware is necessary to ensure accuracy of data and transactions, address facility growth in customers, and improve efficiency.

IMPLICATION OF NOT DOING THE PROJECT(S): Security issues resulting from unauthorized persons and vehicles accessing the site when the facility is closed will not be addressed. In addition, needed technology upgrades and replacement of obsolete components that are required to support improved security and connectivity will not occur. The scale software used for all facility transactional and financial data is expected to no longer be supported within the next few years.

LINKS TO OTHER PROJECTS OR FACILITIES: None

Transfer Station Operations Facilities Upgrades and Improvements



DESCRIPTION: Upgrades to the transfer station lower bay area to address stormwater and security issues, and other infrastructure improvements to the transfer station.

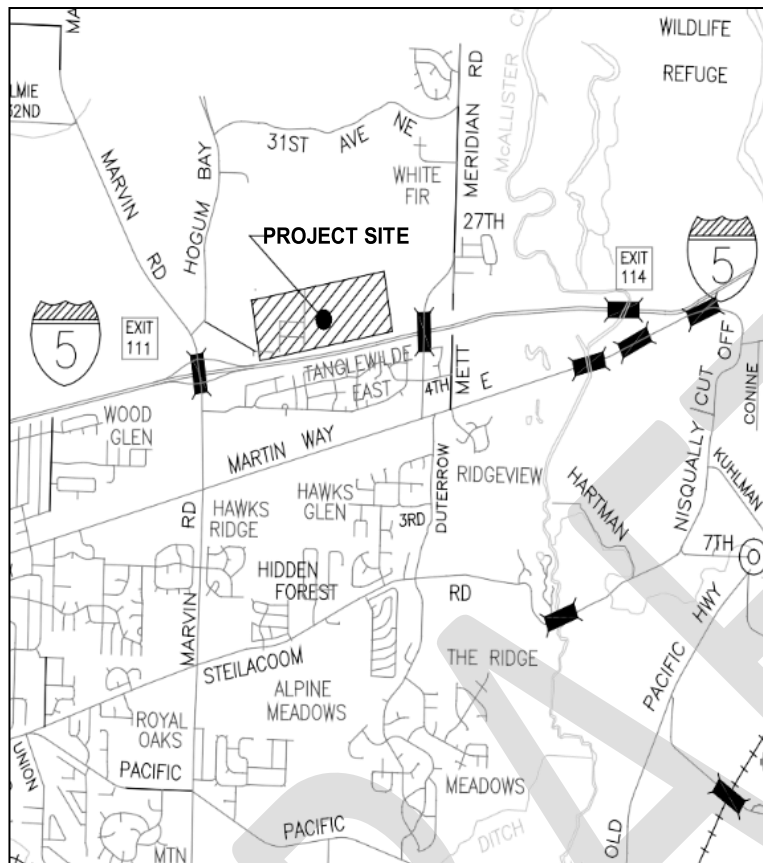
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: The lower bay area of the transfer station is unpaved, and the resulting dust, mud, and ponding are causing negative impacts to the stormwater collection system. In addition, lighting in the area is insufficient for working and security. Infrastructure has deteriorated to the point that working surfaces are worn through.

IMPLICATION OF NOT DOING THE PROJECT(S): Failure to address the lack of paving and improper grade in the lower bay area will result in continued negative impacts to the stormwater collection system, which would have to be addressed through increased and ongoing maintenance of that system. Further deterioration of the infrastructure will cause operational inefficiencies and potential safety issues.

LINKS TO OTHER PROJECTS OR FACILITIES: None

Transfer Station Sort Line Removal



DESCRIPTION: Removal of the transfer station sort line in order to increase the available tipping floor space in the transfer station.

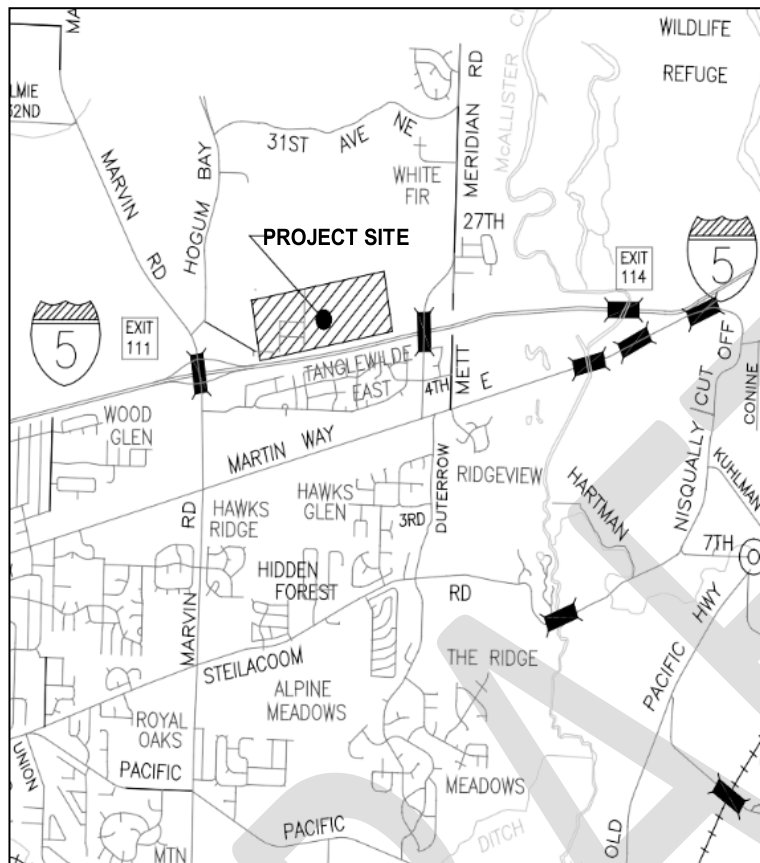
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: A sort line for recovering materials from waste brought to the transfer station has been out-of-use since 2014 and needed repairs are estimated to cost over \$1,000,000. Removal of the sort line is a cost-effective way to increase available floor space in the transfer station and potentially defer the need for future expansion.

IMPLICATION OF NOT DOING THE PROJECT(S): The transfer station operation would benefit from the additional floor space within the transfer station created by removal of the sort line.

LINKS TO OTHER PROJECTS OR FACILITIES: None

Transfer Station Compactor Overhaul and Maintenance



DESCRIPTION: Overhaul and maintenance of the transfer station compactor, which is used to load solid waste in rail containers for transportation to the landfill for disposal.

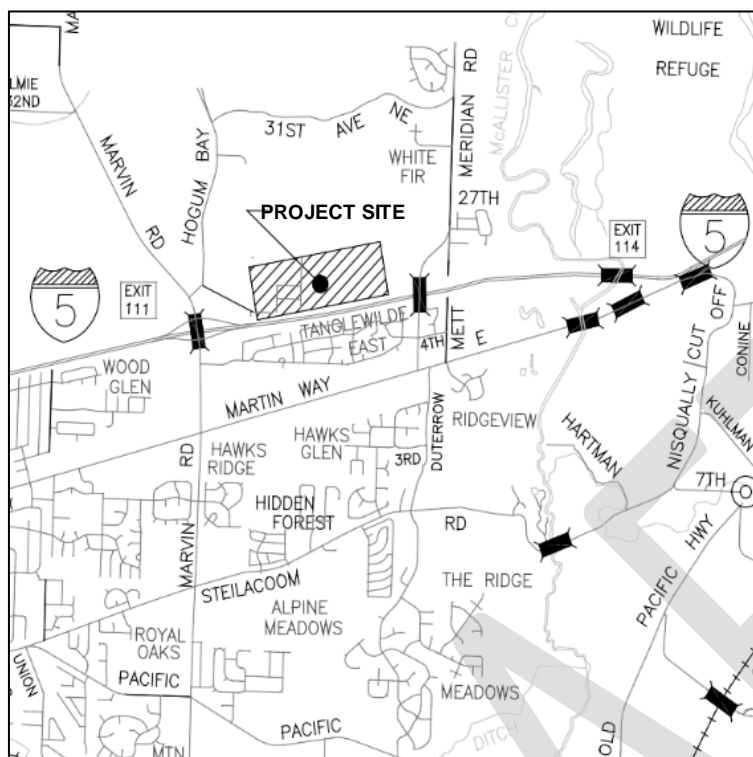
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: Capacity of the transfer station is limited by the load-out rate of the single compactor. The transfer station compactor must be overhauled and routinely maintained through 2030 to ensure uninterrupted operation. (Compactor replacement anticipated in 2031.)

IMPLICATION OF NOT DOING THE PROJECT(S): Maintenance of the compactor is required in order to keep up with loading the incoming waste delivered to the site and ensure efficient transfer to the disposal facility (i.e., landfill).

LINKS TO OTHER PROJECTS OR FACILITIES: None

Public Tipping Area with New Scales and Scalehouses



DESCRIPTION: Relocation of the Public Tipping Area (PTA) from the closed landfill to the southern portion of the facility to include installation of new scales and scalehouses.

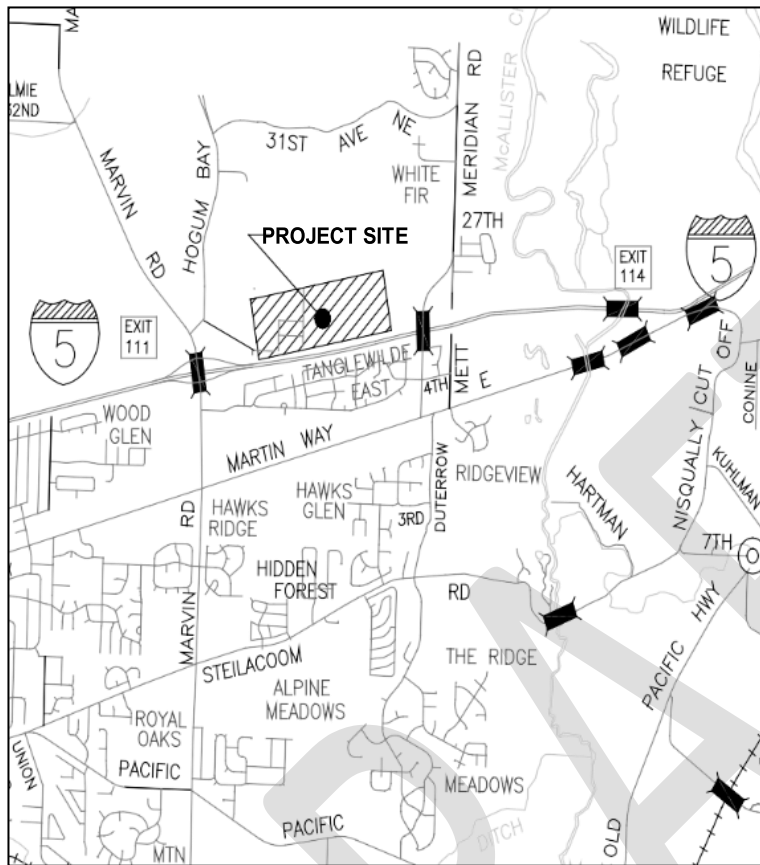
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: The existing PTA, scales, and scalehouses are constructed on the closed landfill and require significant initial and ongoing repairs due to differential settlement. Relocation of this infrastructure is recommended in order to eliminate ongoing maintenance issues; expand facility capacity; improve customer access; and reduce wait times, customer queuing, and traffic conflicts.

IMPLICATION OF NOT DOING THE PROJECT(S): Significant costs would be incurred to repair damage caused by differential settlement to the existing PTA, scales, scalehouses, and ramps, and these costs would be ongoing as settlement continues. In addition, existing infrastructure is inadequate to meet increasing demand for services and address traffic flow and customer safety issues.

LINKS TO OTHER PROJECTS OR FACILITIES: Relocation of the PTA off the closed landfill would eliminate the need for the two projects associated with assessment and repair of the existing scales/scalehouses and PTA.

New Administrative Operations Building



DESCRIPTION: Construction of a consolidated administration building(s) at the Waste and Recovery Center.

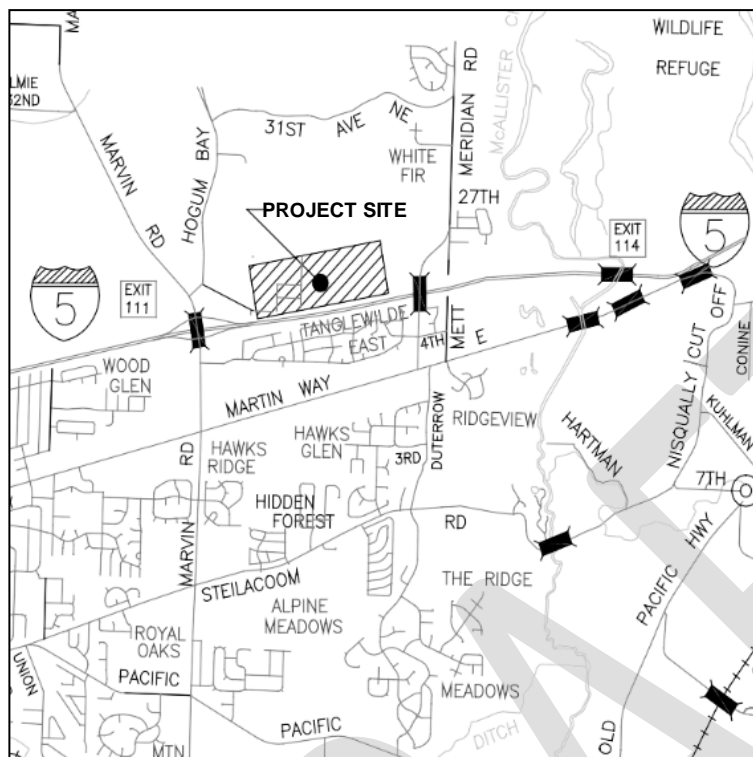
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: Construction of a consolidated administrative building(s) outside of the footprint of the closed landfill is recommended to address technology, security, and health and safety needs. This new construction is in lieu of replacing three existing structures located on the closed landfill that are obsolete and damaged by differential settlement.

IMPLICATION OF NOT DOING THE PROJECT(S): The three existing administrative structures on the closed landfill are obsolete and damaged by differential settlement.

LINKS TO OTHER PROJECTS OR FACILITIES: None

Site Differential Settlement Repairs



DESCRIPTION: Differential settlement caused by decomposing waste within the closed landfill negatively impacts facility infrastructure and requires ongoing assessment and repair.

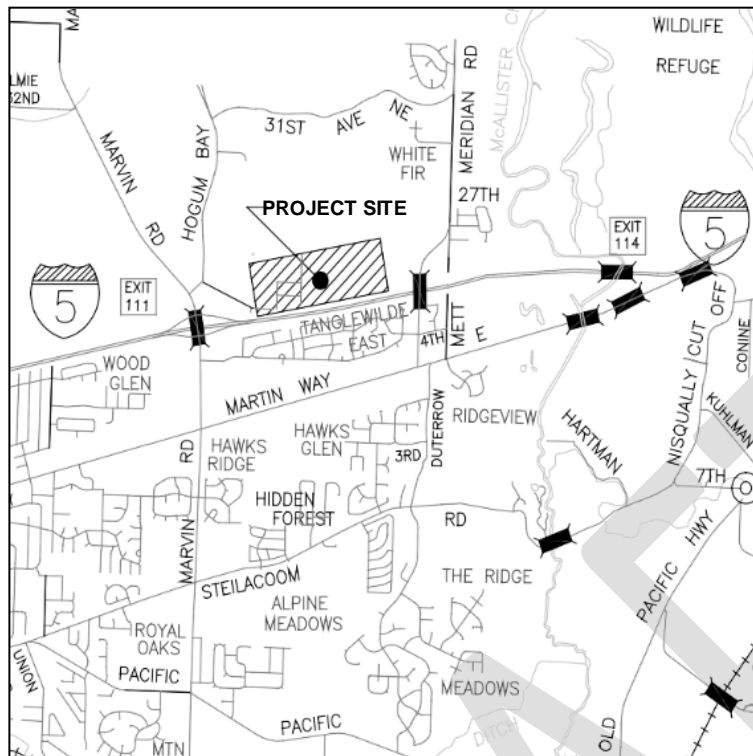
LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: The facility infrastructure that is constructed on closed landfill is subject to differential settlement and requires ongoing assessment and repair to protect County investment as well as to maintain landfill integrity and stay within regulatory compliance.

IMPLICATION OF NOT DOING THE PROJECT(S): Failure to maintain environmental systems and positive drainage would negatively impact landfill integrity and the County's ability to meet permit requirements. Also, infrastructure constructed on the closed landfill must be assessed and repaired in order to maintain service levels and prevent potential safety hazards.

LINKS TO OTHER PROJECTS OR FACILITIES: None

General Facilities Renovations and Upgrades Program



DESCRIPTION: Renovations and upgrades to existing facilities and site to maintain current level of service.

LOCATION: Thurston County Waste and Recovery Center, 2420 Hogum Bay Road, Lacey

JUSTIFICATION: The facilities and site infrastructure are reaching the end of their useful operational life with many components constructed on closed landfill subject to differential settlement. Emerging situations and ongoing degradation will require prompt repair action in order to ensure landfill integrity, stay within regulatory compliance, and ensure the safety of staff.

IMPLICATION OF NOT DOING THE PROJECT (S): Failure to maintain the facilities and infrastructure would negatively impact landfill integrity and the County's ability to meet permit requirements as well as maintain current level of service and adequately provide for staff safety.

LINKS TO OTHER PROJECTS OR FACILITIES: None

CHAPTER 4 - STORMWATER UTILITIY FACILITIES

Discharge of county's drainage systems to natural surface waters systems results in the county being subject to the federal Clean Water Act through the National Pollutant Discharge Elimination System (NPDES) permit program administered by Washington Department of Ecology. Chapter 7 of the Comprehensive Plan (Utilities) provides policy guidance related to stormwater management in Thurston County.

Existing Inventory

The county maintains inventory on nearly 103 miles of pipe systems; nearly 6,290 catch basins, 3,246 culverts and 26,765 pipes, ditch or swales. The county also maintains a drainage inventory of the 77 county owners or operated and the 991 privately owned stormwater facilities. The Surface Water Utility maintains these inventories in VUEWorks.

Future Needs

In 2008, the Stormwater Management Utility was expanded countywide to address NPDES permitting and countywide basin planning. Projects for the area will be generated by the County basin characterizations, basin plans and GIS inventory. The capital projects intend to address emerging environmental or regulatory issues relating to flooding, water quality and/or habitat degradation.

The capital facility projects identified serve previously developed areas within the Stormwater Utility. Many of these areas have inadequate or failing pre-existing stormwater systems, which cause localized flooding, and in some cases affect or could affect water quality and freshwater and marine habitat.

New stormwater facilities constructed in association with parcel development are subject to the requirements set forth by the current edition of the Thurston County Drainage Design and Erosion Control Manual (DDECM). These new facilities are funded entirely by the developer, and address potential flooding and water quality impacts, which are a direct result of the planned development.

Proposed Improvements

Stormwater Improvement projects totaling more than 8.7 million are proposed over the six-year planning period as shown in table 4-1. These costs would be paid by stormwater utility fees and/or grants.

Table 4-1: Public Works Stormwater Utility Projects

REVENUES FOR PROJECTS									
Fund Source			2021	2022	2023	2024	2025	2026	6-Yr. Total
Stormwater Utility Rates			\$2,488,685	\$3,195,000	\$947,000	\$1,479,000	\$599,000	\$50,000	\$8,758,685
TOTALS			\$2,488,685	\$3,195,000	\$947,000	\$1,479,000	\$599,000	\$50,000	\$8,758,685

EXPENDITURES FOR PROJECTS									
Project Name	Fund Source	Urban Growth Area	2021	2022	2023	2024	2025	2026	6-Yr. Total
Boston Harbor Road NE Stormwater Conveyance and Outfall Improvements	SUR	Rural Thurston County	\$1,493,685	\$10,000					\$1,503,685
Woodard Creek Retrofit - Site 4	SUR	Rural Thurston County	\$300,000	\$1,575,000					\$1,875,000
Woodard Creek Retrofit - Site 1	SUR	Olympia UGA	\$10,000						\$10,000
Woodland Creek Estates	SUR	Lacey UGA	\$85,000						\$85,000
Manzanita Road Conveyance	SUR	Rural Thurston County	\$10,000						\$10,000
Albany Street Stormwater Pond Retrofit	SUR	Rural Thurston County	\$5,000						\$5,000
Meadows Subdivision Pond 4C Retrofit	SUR	Lacey UGA	\$141,000	\$575,000					\$716,000
Madrona Beach Road NW Vicinity Retrofits	SUR	Rural Thurston County	\$70,000	\$100,000					\$170,000
Lemon Road Pond	SUR	Rural Thurston County	\$274,000	\$682,000					\$956,000
Lake St Clair Bridge Stormwater Retrofit	SUR	Rural Thurston County		\$25,000	\$130,000				\$155,000
Littlerock Area Stormwater Retrofit	SUR	Rural Thurston County		\$128,000	\$429,000				\$557,000
Sherwood Firs - Phase II	SUR	City of Lacey			\$58,000	\$370,000			\$428,000

Appendix G – Six Year Capital Improvement Program 2021-2026

Cedar Shores Retrofit ¹	SUR	Rural Thurston County			\$82,000	\$187,000			\$269,000
Stuart Place - Conveyance & Treatment	SUR	City of Olympia			\$90,000	\$286,000			\$376,000
Fairground LID Demonstration Project	SUR	Rural Thurston County			\$108,000	\$254,000			\$362,000
Donelly Drive - Infiltration Gallery	SUR	City of Olympia				\$332,000	\$265,000		\$597,000
Cedar Flats Rd. @ Swift Creek - Culvert ²	SUR	Rural Thurston County					\$284,000		\$284,000
Stormwater Facility Improvement Program 2021-2022	SUR	Countywide	\$50,000	\$50,000					\$100,000
Stormwater Land Acquisition/Conservation Future Program 2021-2022	SUR	Countywide	\$50,000	\$50,000					\$100,000
Stormwater Land Acquisition/Conservation Future Program 2023-2026	SUR	Countywide			\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
TOTALS			\$2,488,685	\$3,195,000	\$947,000	\$1,479,000	\$599,000	\$50,000	\$8,758,685

Light grey shading, normal font - closeout project

Medium grey shading, bold font - construction project

Black shading, white font - engineering project

Lemon Road Pond



Description: Construct a constructed wetland/detention pond to provide water quality treatment and stormwater storage.

Location: 4924 Lemon Road NE, Olympia, WA. **Lat:** 47° 6' 9.90027" N **Lon:** 122° 51' 7.26454" W

Justification (Need/Demand): Lemon Road floods during heavy rains and becomes impassable. Woodard Creek has a total maximum daily load (TMDL) for bacteria. This project will construct a constructed wetland to provide water quality treatment and storage to improve water quality before discharging to Woodard Creek and relieve flooding on Lemon Road.

Implication of not doing the project: Lemon Road will continue to flood during heavy rain and water quality of Woodard Creek will not improve.

Links to other related projects or facilities: Woodard Creek Site 4 Retrofit Project.

Boston Harbor Road NE Stormwater Conveyance and Outfall Improvements



Description: Repair/replace failing outfall on Boston Harbor Road, upgrade ditches along Boston Harbor Road, and add a culvert under Boston Harbor Road to reduce flooding.

Location: Boston Harbor Rd NE and 73rd Ave NE.

Justification (Need/Demand): The outfall on Boston Harbor Road NE is failing and needs to be repaired or replaced. The failure is causing damage to driveway and yard at 7325 Boston Harbor Road NE. In addition, the roadside ditches are too small and cannot handle the flows in large rain events nor do they provide treatment to meet today's stormwater standards. This project would replace the failing outfall, install a culvert under Boston Harbor Road connecting to the new outfall to reroute flows, replace undersized driveway culverts, and upgrade ditches to meet current county standards. This will alleviate flooding that occurs when the water fills the ditch and goes over the road and floods driveways and yards before flowing into the Sound.

Implication of not doing the project: Water will continue to erode the yard and driveway at 7325 Boston Harbor Road NE. Flooding will continue along Boston Harbor Road.

Links to other related projects or facilities: None.

Madrona Beach Road NW Vicinity Retrofits



Description: Fix five locations along Madrona Beach Road NW where the stormwater infrastructure is failing or inadequate to handle stormwater flows.

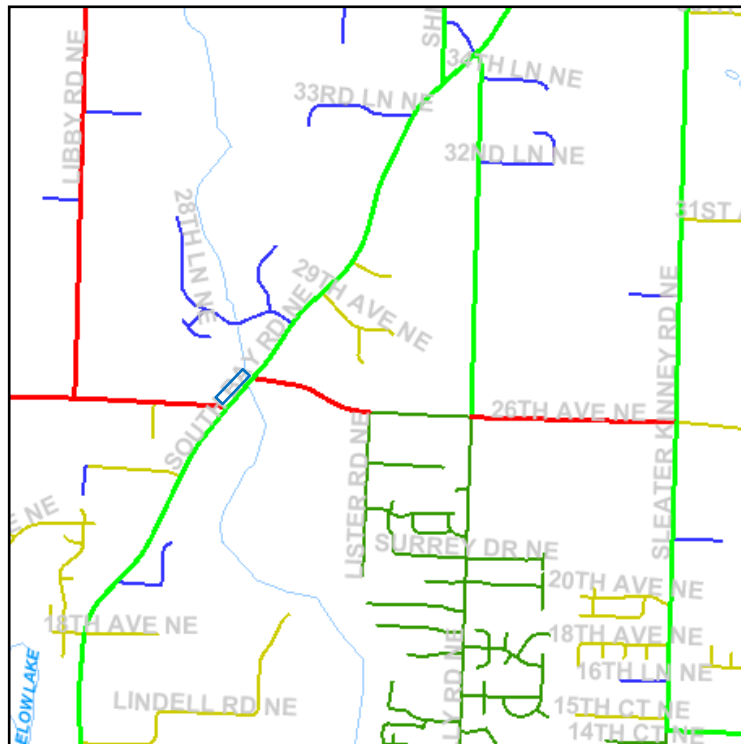
Location: Madrona Beach Road NW between Sexton Ave NW and 1330 Madrona Beach Road NW.

Justification (Need/Demand): The stormwater infrastructure at these 5 locations are either undersized or failing which causes flooding and damage to the roadway or driveways. The damage causes erosion which washes sediment and pollutants into Mud Bay and Eld Inlet.

Implication of not doing the project: Flooding and damage to the road and driveways and sediment deposition to Eld Inlet will continue.

Links to other related projects or facilities: None

Woodard Creek Retrofit - Site 1



DESCRIPTION: Install a bioretention swale and two filter vaults within the Thurston County road Right-of-Way, before discharging directly into Woodard Creek. This project was one of 5 projects identified in the 2014 Woodard Retrofit Study.

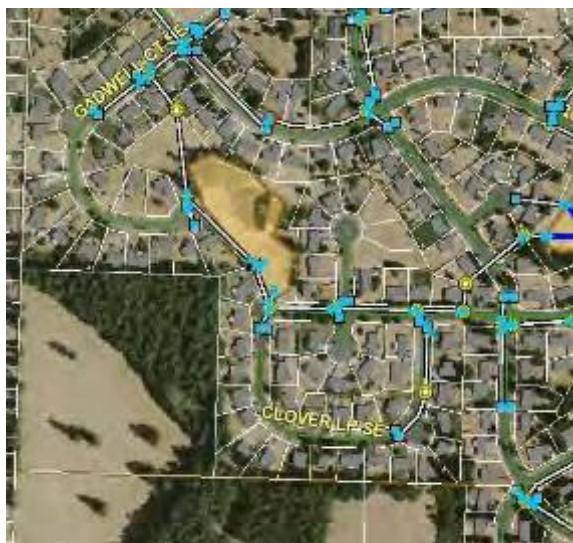
LOCATION: Along South Bay Road NE near the intersection of 26th Ave. NE. Sec. 06, T18N - 01W.

JUSTIFICATION (Need/Demand): The project is located in the Woodard Creek Basin of the Henderson Inlet Watershed. In 2006 the Washington State Department of Ecology published the *Henderson Inlet Watershed Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Temperature Total Daily Maximum Load Study*. The purpose of the proposed improvements is to improve the water quality of stormwater which is a possible source of bacteria in Woodard Creek, Woodard Bay, and Henderson Inlet. In addition, the *Henderson Inlet Watershed Fecal Coliform Water Quality Implementation Plan* identified needed reductions in fecal coliform bacteria in the Woodard Creek basin. The project will further Thurston County's efforts to comply with the TMDL requirements.

IMPLICATION OF NOT DOING THE PROJECT(S): Further contamination of Woodard Creek with pollutants from stormwater and non-compliance with TMDL requirements

LINKS TO OTHER PROJECTS OR FACILITIES: *Henderson Inlet Watershed Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Temperature Total Daily Maximum Load Study. Woodard Creek Basin Stormwater Retrofit Study (2014).*

Meadows Subdivision Pond 4C Retrofit



DESCRIPTION: The project will retrofit the existing Meadows Subdivision Pond 4C by regrading the site and replacing inlet and outlet structures to meet current water quality treatment and flow control standards.

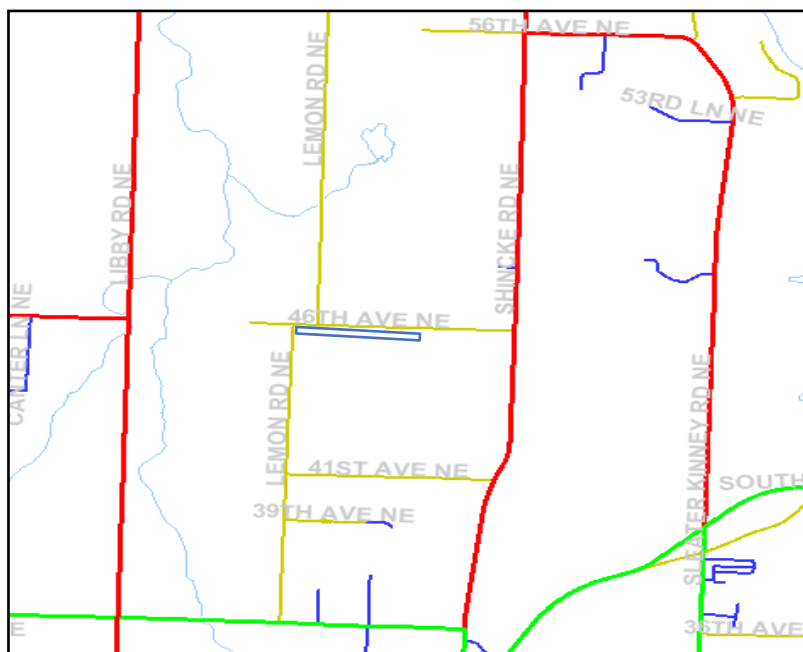
LOCATION: Meadows Subdivision between Clover Loop SE and Gadwell Ct. SE between Steilacoom Rd. SE and Pacific Hwy SE.

JUSTIFICATION (Need/Demand): The subdivision and pond were built in the mid-1980's to the stormwater flow and treatment standards current at the time. These standards do not meet the current standards for water quality and flow control. This project will retrofit the pond and structures to improve water quality and add flow control to meet current standards, i.e., Core Requirements #6 and #7.

IMPLICATION OF NOT DOING THE PROJECT: This system eventually discharges to Little McAllister Creek. If the project is not completed then high flows of untreated stormwater will continue to degrade Little McAllister Creek and McAllister Creek.

LINKS TO OTHER PROJECTS OR FACILITIES: This pond is the first pond in a string of ponds that serve the Meadows subdivision including Mallard Pond a former county CFP project. Future retrofit projects will address the downstream ponds.

Woodard Creek Retrofit - Site 4



DESCRIPTION: Install bioretention swales within the Thurston County road right-of-way to filter the water before discharging to a tributary of Woodard Creek and upgrade ditches and culverts along Lemon Road to alleviate flooding. This project was one of 5 projects identified in the 2014 Woodard Retrofit Study.

LOCATION: Along the south side of 46th Ave. NE between the westerly intersection of Lemon Rd NE and the Chehalis Western Trail. Sec. T19N - 01W.

JUSTIFICATION (Need/Demand):

The project is located in the Woodard Creek Basin of the Henderson Inlet Watershed. In 2006 the Washington State Department of Ecology published the *Henderson Inlet Watershed Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Temperature Total Daily Maximum Load Study*. The purpose of the proposed improvements is to improve the water quality of stormwater which is a possible source of bacteria in Woodard Creek, Woodard Bay, and Henderson Inlet. In addition, the *Henderson Inlet Watershed Fecal Coliform Water Quality Implementation Plan* identified needed reductions in fecal coliform bacteria in the Woodard Creek basin. The project will further Thurston County's efforts to comply with the TMDL requirements. Additionally, Lemon Rd experiences frequent flooding, project would expand roadside ditches and replace undersized culverts in attempt to alleviate flooding during smaller storm events along the roadway.

IMPLICATION OF NOT DOING THE PROJECT(S): Further contamination of Woodard Creek with pollutants from stormwater and non-compliance with TMDL requirements

LINKS TO OTHER PROJECTS OR FACILITIES: *Henderson Inlet Watershed Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Temperature Total Daily Maximum Load Study*. *Woodard Creek Basin Stormwater Retrofit Study (2014)*.

Littlerock Area Stormwater Retrofit



DESCRIPTION: Install approximately 1,100 feet of biofiltration swales and bioretention areas around Littlerock Elementary School, 127 Ave SW, and 128th Ave SW to improve water quality before discharging to the Black River and Beaver Creek.

LOCATION: Along Littlerock Road SW, 127 Ave SW, and 128th Ave SW in the vicinity of Littlerock Elementary

Justification (Need/Demand): Untreated stormwater runoff discharges directly to tributaries of the Black River and Beaver Creek from parking areas and roads. Chinook, Coho, Chum, and Steelhead Salmon use the Black River and Beaver Creek for spawning and rearing. Untreated stormwater runoff has been shown to be detrimental to aquatic organisms in general and these species in particular. Biofiltration is effective at removing pollutants from stormwater runoff and improving water quality.

Implication of not doing the project: Untreated stormwater runoff will continue to be discharged into the Black River and Beaver Creek and affect salmon species and other aquatic organisms.

Links to other related projects or facilities: None

Fairground LID Demonstration Project



Description: Install a variety of green stormwater infrastructure (GSI) best management practices (BMP) around the Thurston County Fairgrounds to manage stormwater and provide educational opportunities.

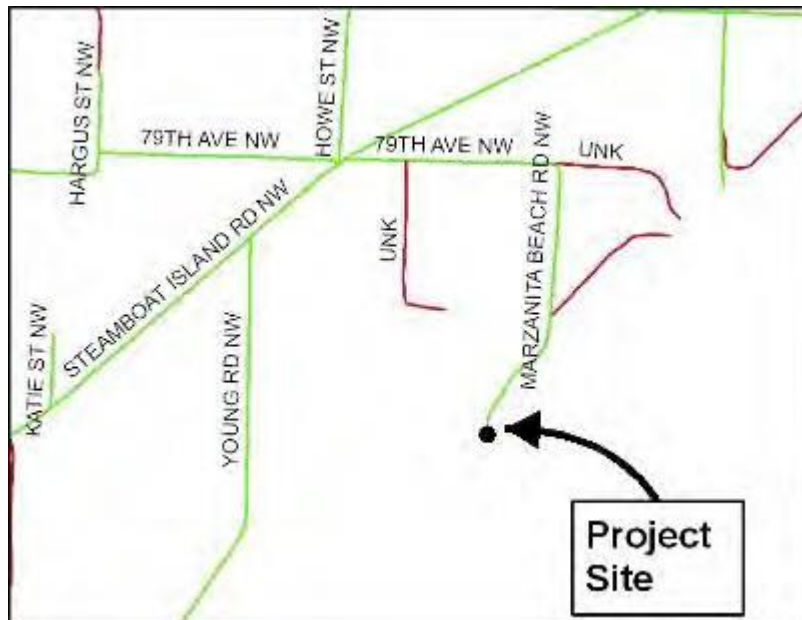
LOCATION: 3054 Carpenter RD SE

JUSTIFICATION (Need/Demand): The NPDES permit requires that low impact development techniques be used in new and redevelopment projects. It also has an education and outreach requirement. The Thurston County Fairgrounds has very few stormwater management features because it was built before they were required, therefore it is in need of retrofitting to manage stormwater. In addition, the Fairgrounds is a destination for many Thurston County residents during the county fair and at other times of the year. This project would retrofit parts of the Fairgrounds by installing GSI BMPs to help manage stormwater, both quality and quantity, and provide educational opportunities for Thurston County citizens to learn about low impact development techniques.

Implication of not doing the project: Parts of the fairgrounds will continue to have untreated stormwater discharges and missed educational opportunities.

Links to other related projects or facilities: None

Manzanita Road Conveyance



DESCRIPTION: Stormwater outfall on a high bank marine bluff.

LOCATION: 7402 Manzanita Dr. NW. Sec. 17, T19N - 02W.

JUSTIFICATION (Need/Demand): The storm drainage system installed in the 1960's as part of the Boston Harbor Water Front Acre Tracts Division No. 2 development has deteriorated and is causing bank erosion. This is a drainage facility that the county has ownership and maintenance responsibility for due to its age and previous work and repairs made in the past.

IMPLICATION OF NOT DOING THE PROJECT(S): Damage to private property due pipe failure causing erosion of shoreline bank

LINKS TO OTHER PROJECTS OR FACILITIES: None.

Cedar Shores Retrofit



DESCRIPTION: Improve and expand existing stormwater pond to meet current standards for flow control and water quality treatment. Evaluate improvements to roadside swales to improve water quality treatment.

LOCATION: Steamboat Island vicinity. Cedar Shores Subdivision at 78th Avenue NW and 78th Loop Northwest. Discharge from subdivision's stormwater pond is to a steep ravine discharging to Totten Inlet.

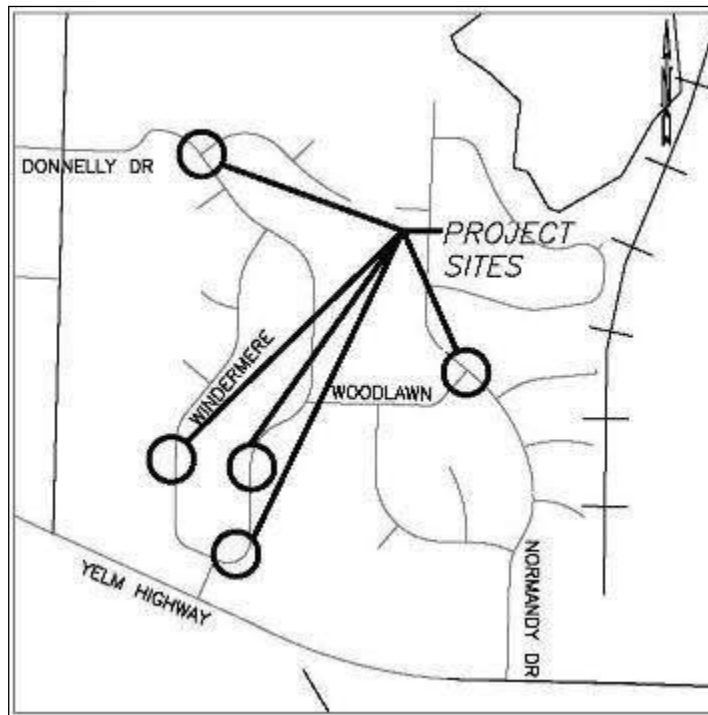
JUSTIFICATION (Need/Demand):

The storm drainage pond was installed in the early 1980's as part of the Cedar Shores Subdivision. The pond is undersized and has deteriorated to the point where limited flow control is provided to prevent downstream erosion. Downstream erosion of steep channels is causing sediment transport to beaches of Totten Inlet and potentially future slide conditions and property damage including potential for damage to public roadway. This is a drainage facility that the county likely has ownership and maintenance responsibility for due to its age.

IMPLICATION OF NOT DOING THE PROJECT(S): Damage to private property and beach due to deposition of sediments and pollutants. Pollutants discharging to Puget Sound (Totten Inlet) potentially adversely affecting shellfish beds and water quality. Continued erosion of steep ravine possibly resulting in slides and property damage to private property and public roads.

LINKS TO OTHER PROJECTS OR FACILITIES: None

Donnelly Drive - Infiltration Gallery



DESCRIPTION: Install treatment devices and infiltration systems at five locations along Donnelly Drive.

LOCATION: Donnelly Drive SE, from Wiggins Road SE to Yelm Highway SE, and Woodlawn Drive SE at Normandy Drive SE, Sec.32, T18N - 01W

JUSTIFICATION (Need/Demand): Portions of Donnelly Drive SE, and Normandy Drive SE flood during major rainfalls and impacts public property and reduces public safety. Roads Maintenance has routinely responded to calls from residents for assistance. Project will reduce flooding of public streets and improve water of runoff reaching groundwater and Chambers Ditch.

IMPLICATION OF NOT DOING THE PROJECT(S): Local streets will continue to flood causing transportation delays and potentially increase the risk of flood related traffic accidents and property damage. Stormwater runoff from urban streets will flow untreated into Chambers Ditch resulting in water quality degradation.

LINKS TO OTHER PROJECTS OR FACILITIES: None

Sherwood Firs - Phase II



DESCRIPTION: Retrofit / rehabilitate existing drywells; determine if conveyance system is in need of being upgraded.

LOCATION: Sherwood Firs Subdivision, Pamela Dr SE and Steilacoom Rd SE. Sec. 14, T18N - 01W.

JUSTIFICATION (Need/Demand):

The storm drainage system installed in the 1970's as part of the Sherwood Firs Subdivision is no longer functioning as designed. Over the years the drywells and infiltration trenches have filled with fines and are no longer infiltrating and previous rates. This is a drainage facility that the county has ownership and maintenance responsibility for due to its age and previous work and repairs made in the past to. Road Maintenance has brought this to the storm and surface water utility's attention since staff is called out on a frequent basis to deal with localized road flooding.

IMPLICATION OF NOT DOING THE PROJECT(S): Damage to private property due to flooding.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Stuart Place – Conveyance & Treatment



DESCRIPTION: Repair / restore swale leading from catch basin at Stuart St NE east to Sleater Kinney Rd NE.

LOCATION: Sleater Kinney Rd NE between 15th and 26th Aves NE.

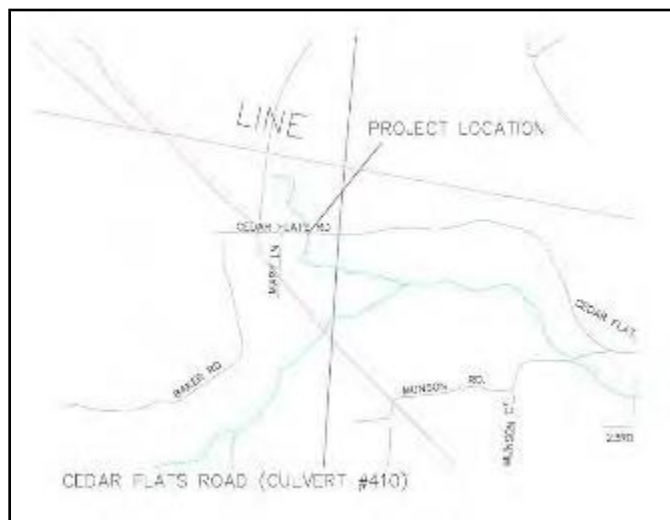
JUSTIFICATION (Need/Demand):

The storm drainage system installed in the 1970's as part of the Stuart Place Subdivision is no longer functioning as designed. Over the years, as lots have developed, and ownership has changed hands the drainage ditch providing conveyance from Stuart St NE to Sleater Kinney Rd NE has been filled in or modified and no longer provides a continuous flow path. This is a drainage facility that the county has ownership and maintenance responsibility for due to its age and previous work and repairs made in the past. During larger storm events the water now flows between homes and septic system drain fields near Vicki Ct NE.

IMPLICATION OF NOT DOING THE PROJECT(S): Damage to private property due to localized flooding.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A.

Cedar Flats Rd. @ Swift Creek - Culvert



DESCRIPTION: Replace existing 30" concrete culvert with a new pre-cast slab bridge to relieve flooding and provide fish passage.

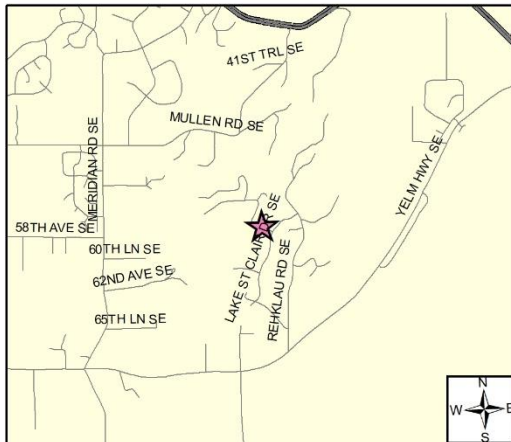
LOCATION: Cedar Flats Road SW at Swift Creek, 3300' northwest of Munson Road SW. Section 22 Township 18 Range 3W

JUSTIFICATION (Need/Demand): The existing culvert does not have the capacity to pass larger storms. Swift Creek has flooded Cedar Flats Road on average 1-2 times every year. The flooded road poses a risk to motorists and puts at risk the County road and right of way. In addition, Washington Department of Fish and Wildlife have identified this culvert as a barrier to fish passage per WDFW phone conversation and Thurston County Barrier Culvert Inventory prepared by WDFW. Fish present in Swift Creek are chinook, chum, and steelhead.

IMPLICATION OF NOT DOING THE PROJECT(S): Continued flooding of Cedar Flats Road during major storms that will put motorists at risk, jeopardize the county road and right of way, and may impact private property. Each closure affects 20 residents. There will continue to be a blockage for fish migration.

LINKS TO OTHER PROJECTS OR FACILITIES: Munson Rd @ Swift Creek Culvert Upgrade. This project should occur either at the same time or after the Munson Road project.

Lake Saint Clair Bridge Stormwater Retrofit



DESCRIPTION: Proposal is to install a proprietary practice to provide enhanced phosphorus treatment to the runoff from the roadway. In addition to treatment, while the facility may not provide flow control, the inflow could be designed to take most of the flow and pass it through a pipe into Lake Saint Clair, which would help with the erosion that occurs on the northeast bank of the bridge.

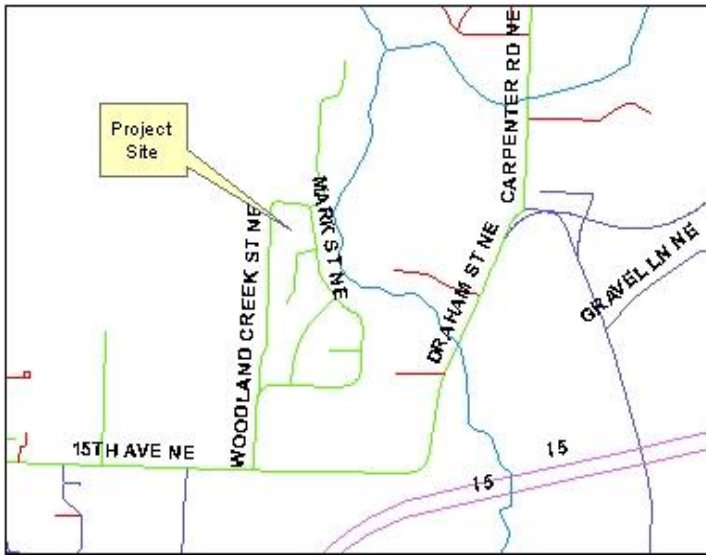
LOCATION: 5733 Lake Saint Clair Dr SE (approx.)

JUSTIFICATION (Need/Demand): Lake Saint Clair is surrounded by older development built in the 60's and 70's prior to any stormwater management requirements. The County has received complaints from residents regarding flow barreling uncontrolled down the hill and over the side of the bridge into Lake Saint Clair. In addition to receiving no treatment, the water is eroding the banks around the bridge.

IMPLICATION OF NOT DOING THE PROJECT(S): Continued erosion and potential flooding.

LINKS TO OTHER PROJECTS OR FACILITIES: None.

Woodland Creek Estates



DESCRIPTION: Install a bioinfiltration swale with underdrain to treat stormwater runoff.

LOCATION: Lacey UGA, Woodland Creek Estates Subdivision located north of 15th Avenue NE in vicinity of N. Thurston High School.

JUSTIFICATION (Need/Demand):

This area is identified as one of the major sources of fecal coliform bacterial pollution to Woodland Creek which passes through the northern part of the subdivision. It will be subject to a project to convert septic systems to sewer in 2013. The 1995 Woodland/Woodard Creek Basin Plan and the 2006 TMDL study by the Washington State Department of Ecology have shown fecal coliform bacteria pollution in Woodland Creek.

IMPLICATION OF NOT DOING THE PROJECT(S): Continuation of water quality impairment in Woodland Creek and Henderson Inlet that has contributed to closed shellfish harvesting areas. An opportunity to tie this project with the sewer system installation will be lost.

LINKS TO OTHER PROJECTS OR FACILITIES: Tanglewilde Retrofits.

CHAPTER 5 – TRANSPORTATION

Thurston County is responsible for maintaining over 1,000 miles of roads and associated facilities and 109 bridges. The capital facilities program attempts to meet the demands as the population grows.

Existing Inventory

Thurston County's roadway network is principally made up of County roads as well as state highways, such as I-5, SR 101, SR 8, SR 12, and SR 507, which provide intercity and interstate connections. Table 6-1 depicts the inventory of County roadways by functional classification.

Table 5-1 Existing Transportation Facilities

Facility Name	Location	Capacity or size (miles)
Rural Minor Arterial	County-Wide	14.467
Rural Major Collector	County-Wide	225.549
Rural Minor Collector	County-Wide	53.630
Urban Principal Arterial	County-Wide	7.308
Urban Minor Arterial	County-Wide	34.667
Urban Collector	County-Wide	17.901
Bridges	County-Wide	109
Bike Lanes - As upgrades are made to any road above local access, paved shoulders are added which provide space for pedestrian and bicycle use.		

The County Public Works Transportation Division also maintains the following inventories:

- Traffic Sign Inventory
- Guardrail Inventory
- Bridge Index (summary of bridge conditions)
- Pavement Management Program (pavement condition survey)
- Thurston County Barrier Culvert Inventory (fish passage)

Future Needs

The Chapter 5 Transportation of the Thurston County Comprehensive Plan sets level of service (LOS) standards for county roads and associated facilities. The Six-Year Transportation Improvement Program (TIP) specifies the transportation capital program in accordance with the adopted Comprehensive Plan and provides descriptions of each project.

Proposed Improvement Projects

The county plans to expend approximately \$89.8 million on transportation projects over the next six-year planning period. These projects are improvements or additions to transportation facilities such as roads, bridges, sidewalks, bike lanes, and other roadway features that have been prioritized to meet population demands and within the county budget. The categories below describe the types of projects to be completed. The TIP provides more details about each proposed project and can be found on the Public Works website.

Bridge projects are typically selected by using the State of Washington Inventory of Bridges and Structures (SWIBS) database. The database analyzes the structural adequacy and safety of the bridge, its serviceability and functional obsolescence, and how essential it is for public use. The State Bridge Committee selects bridges based on the SWIBS criteria for available federal funding.

Culvert Projects include those culverts that are in need of repair and/or replacement based upon condition, maintenance history and other criteria.

Design Standard Providing greater lane width, improve roadway curves, slope flattening or increase load carrying capacity on new road construction projects. These does not typically do add lanes except as needed for safety or capacity at certain intersections.

Fish Passage Enhancements that are fish passage barriers or deteriorating culverts are ranked in their order of benefits to salmonid using the Salmon and Steelhead Enhancement and Restoration (SSHEAR) metrology developed by Washington Department of Fish and Wildlife (WDFW). Other priority methods may be used to secure funding depending on the funding opportunities.

Non-Motorized Improvements: Includes the construction of new sidewalks, crosswalks, safe routes to school, and accessibility improvements.

Roadway Capacity improvements are those that assure transportation infrastructure is available to meet demand created by new development as required by the Growth Management Act. County concurrency projects include those not addressed by developers and primarily consist of projects identified as regional needs in the Thurston Regional Transportation Plan, 20-year Transportation Project List contained herein.

Road Preservation considers the inventory of visual pavement distress/cracking, traffic volumes and other factors to rate the pavement. Asphalt overlays are considered a restoration to the roadway versus routine maintenance such as patching or liquid asphalt sealing of the pavement surface.

Safety Improvements includes a variety of investments that are intended to support the goals outlined in the Washington State Strategic Highway Safety Plan, Target Zero. These could include spot improvements such as turn lanes at an intersection or systemic investments made throughout the roadway network. This category also includes repair of compromised roadways where it is determined unsafe to use due to natural disaster, such as floods, mudslides, bank erosion.

Programs include miscellaneous projects, studies, culverts and small bridge improvements and other more minor improvements.

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Table 5-2 Transportation Proposed Projects and Funding

REVENUES FOR PROJECTS							
Fund Source	2021	2022	2023	2024	2025	2026	6-Yr. Total
County Roads Fund	\$7,640,780	\$3,521,000	\$6,684,150	\$5,975,000	\$5,579,000	\$5,160,000	\$34,559,930
Transportation Improvement Board	\$2,489,207	\$0	\$5,285,500	\$0	\$0	\$0	\$7,774,707
Transportation Impact Fees	\$1,000,000	\$2,309,000	\$0	\$0	\$0	\$0	\$3,309,000
Washington State Dept. of Transportation	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000
Surface Transportation Program / Surface Transportation Block Grant Program	\$1,417,143	\$735,000	\$1,969,000	\$3,199,000	\$2,241,000	\$0	\$9,561,143
Federal Bridge Replacement Fund (BRAC)	\$28,000	\$0	\$0	\$0	\$0	\$0	\$28,000
Local City	\$480,000	\$0	\$0	\$0	\$0	\$0	\$480,000
Highway Safety Improvement Program	\$198,000	\$338,000	\$180,000	\$2,466,000	\$54,000	\$0	\$3,236,000
Rural Arterial Program	\$1,331,000	\$0	\$1,800,000	\$0	\$0	\$0	\$3,131,000
Recreation and Conservation Office Grants	\$1,438,000	\$0	\$2,254,000	\$0	\$0	\$0	\$3,692,000
Real Estate Excise Tax	\$4,463,000	\$2,837,000	\$2,966,000	\$2,000,000	\$3,000,000	\$3,000,000	\$18,266,000
Other (Developer, other agency, or bond)	\$270,797	\$2,767,000	\$493,350	\$194,000	\$0	\$0	\$3,725,147
Park Impact Fees	\$0	\$0	\$0	\$0	\$0	\$10,000	\$10,000
Safe Routes To School	\$0	\$0	\$900,000	0	\$0	\$0	\$900,000
Federal Highway Bicycle/Pedestrian Grant	\$0	\$0	\$819,000	0	\$0	\$0	\$819,000
TOTALS	\$21,055,927	\$12,507,000	\$23,351,000	\$13,834,000	\$10,874,000	\$8,170,000	\$89,791,927

EXPENDITURES FOR PROJECTS								
Project Name	Fund Source	2021	2022	2023	2024	2025	2026	6-Yr. Total
Mullen Rd Phase 1 (City of Lacey Limits to Carpenter Rd)	TIB/TIF/Lacey/CRF	\$4,544,787	\$15,000					\$4,559,787
Yelm Hwy SE & Meridian Rd SE Intersection Improvement	STP/CRF	\$2,000,000	\$7,000					\$2,007,000
Vail Rd SE Improvements Phase 2 (138th Ave SE to 153rd Ave SE)	RAP/CRF	\$1,735,000	\$10,000					\$1,745,000
188th and Moon Rd Intersection	WSDOT	\$300,000	-					\$300,000
Carpenter Rd Barrier	CRF	\$200,000						\$200,000

2018 Highway Safety Improvement Program	HSIP	\$50,000						\$50,000
Marvin Rd Upgrade Phase 2 (Mullen Rd to 19th Ave)	Dev	\$20,797						\$20,797
Reeder Road Bridge R-3 at Beaver Creek	BRAC	\$28,000						\$28,000
Johnson Point Rd NE & Hawks Prairie Rd - Intersection Improvements	TIF/Dev/STBG	\$125,000	\$425,000	\$240,000	\$3,020,000	\$7,000		\$3,817,000
Sargent Rd NW (US12 to Old Hwy 99)	TIF/CRF	\$100,000	\$100,000					\$200,000
Yelm Hwy SE and Pacific Ave Pedestrian Improvements, Phase 1	STP/HSIP/CRF	\$149,000	\$714,000	\$46,000				\$909,000
Old Hwy 99 & Tilley Rd Intersection Improvements	CRF	\$70,000						\$70,000
US 12 Urban Improvements (Old Hwy 99 to W. UGA Boundary)	REET/TIF/Dev	\$400,000	\$2,722,000					\$3,122,000
Marvin Rd Upgrade Phase 1 (22nd Ave to Pacific Ave)	TIB/TIF/Dev/CRF	\$225,000	\$3,367,000	\$6,343,000	\$10,000			\$9,945,000
Littlerock Rd SW and 113th Ave SE (Bridge & Intersection Improvements)	TIF/STBG/Dev/CRF	\$157,343	\$100,000	\$1,958,000	\$450,000	\$7,000		\$2,672,343
2024 Highway Safety Improvement Program	HSIP/CRF	\$100,000	\$100,000	\$200,000	\$2,740,000	\$60,000		\$3,200,000
Carpenter Road Pedestrian Improvements - Regional Transition Center	REET	\$350,000	-					\$350,000
Case Road Fish Barrier Removal	REET	\$5,000						\$5,000
Gate Road Culvert Replacements	REET	\$2,000,000	\$5,000					\$2,005,000
Fish Passage Enhancement Program (through 2022)	REET	\$710,000	\$1,472,000					\$2,182,000
Latigo St. at Spurgeon Creek & Chehalis Western Trail	REET/RCO	\$1,736,000	\$10,000					\$1,746,000
Old Hwy 99 at Intersections of Sargent Rd and 201st Ave	STBG/CRF		\$210,000	\$220,000	\$564,000	\$2,750,000	\$10,000	\$3,754,000
French Rd NW Culvert Replacement	REET/RCO			\$2,920,000				\$2,920,000
Fish Passage Enhancement Program (2023-2026)	REET			\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,000,000

Pleasant Glade Elementary Pedestrian Improvements	SRTS/CRF			\$1,000,000				\$1,000,000
Yelm Hwy SE Bridge Replacement (O-12)	CRF						\$50,000	\$50,000
Gate-Belmore Trail Development	PIF						\$10,000	\$10,000
Yelm Hwy SE and Pacific Ave Ped Improvements, Phase 2	Bic-Ped/CRF			\$1,024,000				\$1,024,000
Country Club Drive at Green Cove Culvert Replacement	REET/RCO			\$300,000				\$300,000
113th Ave SE (SR 121/Tilley to McCorkle Rd)	CRF						\$10,000	\$10,000
McCorkle Rd SE (113th Ave to Old Hwy 99)	CRF						\$10,000	\$10,000
183rd Ave (US 12 to Old Hwy 99)	RAP/CRF			\$2,050,000				\$2,050,000
Road Preservation Program (2021-2022)	REET/CRF	\$6,000,000	\$3,200,000					\$9,200,000
Road Preservation Program (2023-2026)	REET/CRF	-	-	\$6,000,000	\$6,000,000	\$7,000,000	\$7,000,000	\$26,000,000
Bridge Program	CRF						\$10,000	\$10,000
Culvert Program	CRF						\$10,000	\$10,000
Americans With Disability Act (ADA) Improvements (2021 - 2022)	CRF	\$50,000	\$50,000					\$100,000
Americans With Disability Act (ADA) Improvements (2023 - 2026)	CRF			\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Thurston County Pedestrian and Bicycle Program	CRF						\$10,000	\$10,000
TOTALS		\$21,055,927	\$12,507,000	\$23,351,000	\$13,834,000	\$10,874,000	\$8,170,000	\$89,791,927

Completed projects:

Olympic View Pedestrian Improvements,
Gate-Belmore Engineering Study

Dropped projects:

Mullen Road Overheight Warning
Old Highway 99 Rural Capacity Project

Legend:

Light grey shading, normal font - closeout project

Medium grey shading, bold font - construction project

Black shading, white font - engineering project

Bic-Ped - Highway Bicycle-Pedestrian Grant

BRAC - Federal Bridge Replacement Fund

CRF - County Roads Fund

HSIP - Highway Safety Improvement Program

Local City

Dev - Developer

PIF - Park Impact Fees

RAP - Rural Arterial Program

RCO - Washington State Recreation and Conservation Office

REET - Real Estate Excise Tax Second Quarter

SRTS - Safe Routes to School

STBG - Surface Transportation Block Grant

STP - Surface Transportation Program

TIB - Transportation Improvement Board

TIF - Transportation Impact Fees

WSDOT - WA Dept. of Transportation Direct Appropriation

CHAPTER 6 – COUNTY OWNED WATER AND SEWER SYSTEMS

The county owns three water systems (Boston Harbor, Grand Mound, and Tamoshan) and 5 sewer systems (Grand Mound, Boston Harbor, Tamoshan/Beverly Beach, Olympic View, and Woodland Creek Estates). Woodland Creek Estates Sanitary Sewer is located within the City of Lacey Urban Growth Area and is maintained by the City of Lacey.

Table 6-1 Existing County Water and Sewer Inventory

Facility Name	Location	# of Connections ¹
SEWER SYSTEMS		
Grand Mound	Southwest	350
Boston Harbor	North	264
Tamoshan / Beverly Beach	Cooper Point	117
Olympic View	NW	27
WATER SYSTEMS		
Grand Mound	Southwest	388
Boston Harbor	North	280
Tamoshan	Cooper Point	95

¹ One connection to a system can represent more than one Equivalent Residential Unit (ERU). Numbers do not include pending connections.

Future Needs

A sewer system level of service standard of capacity to provide sewer collection and wastewater treatment services and a water system level of service standard of capacity to provide domestic water and fire flow services for residential, commercial, and industrial uses measured in Equivalent Residential Units (ERU). The minimum ERU for rural is 900 cf/mo and urban is 700 cf/mo. Additionally, sewer systems shall meet federal, state, and local permit requirements for receiving water standards, and water systems shall meet federal, state, and local drinking water standards.

Based on project population growth several new infrastructure improvement projects in the Boston Harbor, Tamoshan and Grand Mound service areas are proposed as well as multiple additional projects to maintain the required level of service.

Proposed Projects

Improvement projects and associated facilities, totaling more than \$11.6 million, are proposed over the six-year planning period to meet or maintain level of service. These costs would be paid for by utility revenue, Real Estate Excise Tax, and loans as shown in Table 6-2.

Table 6-2 Water and Sewer Proposed Capital Projects and Funding

REVENUES FOR PROJECTS									
Fund Source			2021	2022	2023	2024	2025	2026	6-Yr. Total
Water & Sewer Utility Rates			\$792,543	\$1,031,543	\$2,619,000	\$1,357,000	\$1,451,000	\$700,000	\$7,951,086
Real Estate Excise Tax			\$619,457	\$2,169,457			\$55,000	\$590,000	\$3,433,914
Loans/Grants					\$40,000	\$200,000			\$240,000
TOTALS			\$1,412,000	\$3,201,000	\$2,659,000	\$1,557,000	\$1,506,000	\$1,290,000	\$11,625,000

EXPENDITURES FOR PROJECTS									
Project Name	Fund Source	Urban Growth Area	2021	2022	2023	2024	2025	2026	6-Yr. Total
Utilities Asset Management Plan	REET/WSUR	Rural Thurston County	\$50,000	\$50,000					\$100,000
SCADA Control System Evaluation/Upgrades	WSUR	Rural Thurston County	\$50,000	\$150,000					\$200,000
Tamoshan Water Treatment Unit Process Assessment/Upgrade	REET	Rural Thurston County	\$40,000	\$140,000					\$180,000
Tamoshan 63rd Ave AC Pipe Watermain Replacement	L/G	Rural Thurston County			\$40,000	\$200,000			\$240,000
Tamoshan 2021-2022 Water Infrastructure Improvement Program	WSUR	Rural Thurston County	\$35,000	\$30,000					\$65,000
Tamoshan 2023-2026 Water Infrastructure Improvement Program	WSUR	Rural Thurston County			\$85,000	\$30,000	\$135,000	\$190,000	\$440,000
Tamoshan 2021-2022 Sewer Infrastructure Improvement Program	WSUR	Rural Thurston County	\$105,000	\$105,000					\$210,000
Tamoshan 2023-2026 Sewer Infrastructure Improvement Program	WSUR	Rural Thurston County			\$120,000	\$110,000	\$180,000	\$120,000	\$530,000

Appendix G – Six Year Capital Improvement Program 2021-2026

Boston Harbor Wastewater Treatment Plant Generator Replacement	REET/WSUR	Rural Thurston County	\$366,000						\$366,000
Boston Harbor Well	REET	Rural Thurston County					\$55,000	\$590,000	\$645,000
Boston Harbor 2021-2022 Water Infrastructure Improvement Program	WSUR	Rural Thurston County	\$60,000	\$50,000					\$110,000
Boston Harbor 2023-2026 Water Infrastructure Improvement Program	WSUR	Rural Thurston County			\$185,000	\$85,000	\$50,000	\$50,000	\$370,000
Boston Harbor 2021-2022 Sewer Infrastructure Improvement Program	WSUR	Rural Thurston County	\$100,000	\$75,000					\$175,000
Boston Harbor 2023-2026 Sewer Infrastructure Improvement Program	WSUR	Rural Thurston County			\$60,000	\$30,000	\$70,000	\$130,000	\$290,000
Olympic View 2021-2022 Sewer Infrastructure Improvement Program	WSUR	Rural Thurston County	\$10,000						\$10,000
Olympic View 2023-2026 Sewer Infrastructure Improvement Program	WSUR	Rural Thurston County			\$10,000		\$10,000		\$20,000
Grand Mound Odor Mitigation at North Vac Station	WSUR	Grand Mound	\$20,000						\$20,000
Grand Mound Wastewater Treatment Plant Expansion for Class A Reclamation	REET	Grand Mound	\$200,000	\$2,000,000					\$2,200,000
Grand Mound Clarifier No. 2 Rebuild and Recoating	WSUR	Grand Mound	\$120,000						\$120,000
Grand Mound New Water Sources	WSUR	Grand Mound	\$31,000	\$156,000	\$354,000	\$752,000	\$636,000		\$1,929,000
Grand Mound Wastewater Treatment Plant Second Oxidation Ditch	WSUR	Grand Mound		\$250,000	\$1,550,000				\$1,800,000
Grand Mound 2021-2022 Water Infrastructure Improvement Program	WSUR	Grand Mound	\$100,000	\$100,000					\$200,000

Appendix G – Six Year Capital Improvement Program 2021-2026

Grand Mound 2023-26 Water Infrastructure Improvement Program	WSUR	Grand Mound			\$50,000	\$50,000	\$50,000	\$110,000	\$260,000
Grand Mound 2021-2022 Sewer Infrastructure Improvement Program	WSUR	Grand Mound	\$125,000	\$95,000					\$220,000
Grand Mound 2023-2026 Sewer Infrastructure Improvement Program	WSUR	Grand Mound			\$205,000	\$300,000	\$320,000	\$100,000	\$925,000
TOTALS			\$1,412,000	\$3,201,000	\$2,659,000	\$1,557,000	\$1,506,000	\$1,290,000	\$11,625,000

Legend:

WSUR - Water & Sewer Utility Rates

REET-Real Estate Excise Tax Second Quarter Funds

L/G - Loans/Grants

Light grey shading, normal font - closeout project

Medium grey shading, bold font - construction project

Black shading, white font - engineering project

Grand Mound System Scada Radio Control Upgrade



DESCRIPTION: Radio SCADA system needs to be upgraded due to communication issues and equipment age. The Radio SCADA system will be updated to allow continued operation and compliance and will aid in ongoing system optimization.

LOCATION: 20248 Grand Mound Way, Grand Mound WA.

JUSTIFICATION(Need/Demand): Without proper communication and controls the system will not operate properly.

IMPLICATION OF NOT DOING THE PROJECT(S): The regulatory agencies may impose operational violations, fines, and could impose a moratorium on growth to the area if the county does not take steps to maintain current level of service and comply with the operational permits.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Second Grand Mound Reservoir



DESCRIPTION: Design and construct a second reservoir to meet future development demands and fire flows for emergency services.

LOCATION: Grand Mound near the existing reservoir.

JUSTIFICATION (Need/Demand): Increased demand for water service based on urban development and to improve the system capacity to meet fire flow demands.

IMPLICATION OF NOT DOING THE PROJECT(S): Inability of utility to provide water connections to new customer and to provide adequate water

pressure needed to meet fire protection needs.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Grand Mound New Water Sources



DESCRIPTION: Evaluation, land acquisition, and installation of future Wells #3 and #4 as new water sources.

LOCATION: Pending final well siting evaluation.

JUSTIFICATION (Need/Demand): This well site may be required to meet water system demand for the twenty- year planning horizon.

IMPLICATION OF NOT DOING THE PROJECT(S): Inadequate pump capacity to meet demand. Reduced economic activity in the Grand Mound.

LINKS TO OTHER PROJECTS OR FACILITIES: Grand Mound Highway 99 to Highway 9 Sewer main extension/Grand Mound Water Main Extension.

**Grand Mound Wastewater Treatment Plant
Second Oxidation Ditch**



DESCRIPTION: Design and construct new oxidation ditch, new disinfection equipment, and related components.

LOCATION: 20248 Grand Mound Way, Grand Mound WA.

JUSTIFICATION (Need/Demand): Increased demand and regulatory compliance NPDES No. WA0042099. Growth in the Grand Mound UGA will require the WWTP to meet requirements of the NPDES permit.

IMPLICATION OF NOT DOING THE PROJECT(S):

Out of compliance with permit and Department of Ecology may levy violations, fines, and may impose a moratorium on growth to the area if the County does not comply with the NPDES permit of planning and scheduling for capital improvements to maintain capacity and achieve the effluent limitation of the permit.

LINKS TO OTHER PROJECTS OR FACILITIES: Boston Harbor and Tamoshan Wastewater Treatment facility bio-solids disposal.

Grand Mound Wastewater Treatment Plant Expansion for Class A Reclamation



DESCRIPTION: Expand plant capacity to produce Class A reclaimed water. This was a condition of water rights acquisition. The timing of the improvements is dependent on the use of the water rights.

LOCATION: 20248 Grand Mound Way, Grand Mound, WA.

JUSTIFICATION (Need/Demand): Regulatory compliance NPDES No. WA0042099.

IMPLICATION OF NOT DOING THE PROJECT(S): Department of Ecology may issue violations, levy fines, or impose a moratorium on growth to the area if compliance with the NPDES permit is not followed.

LINKS TO OTHER PROJECTS OR FACILITIES: Grand Mound Waste Water Treatment Plant Second Oxidation Ditch.

Grand Mound Wastewater Treatment Plant Improvements



DESCRIPTION: Assessment and repair of the existing clarifier units at the WWTP.

LOCATION: 20248 Grand Mound Way, Grand Mound, WA.

JUSTIFICATION (Need/Demand): Regulatory compliance NPDES No. WA0042099.

IMPLICATION OF NOT DOING THE PROJECT(S): Department of Ecology may issue violations, levy fines, or impose a moratorium on growth to the area if compliance with the NPDES permit is not followed.

LINKS TO OTHER PROJECTS OR FACILITIES:

Grand Mound Waste Water Treatment Plant Second Oxidation Ditch.

Grand Mound Way Watermain Loop



DESCRIPTION: Installation of a new water main along Grand Mound Way.

LOCATION: New water main would be installed along Grand Mound Way from Old Highway 99 to the existing water treatment plant.

JUSTIFICATION (Need/Demand): This would improve water flow reliability and improve water quality. In addition will improve fire flows within the service area.

IMPLICATION OF NOT DOING THE PROJECT(S): Reduces water circulation, water quality and impacts fire flows.

LINKS TO OTHER PROJECTS OR FACILITIES:
n/a

Grand Mound Vacuum System Program



DESCRIPTION: Evaluation of the existing vacuum sewage collection stations and design of any recommended upgrades.

LOCATION: 20248 Grand Mound Way, Grand Mound WA.

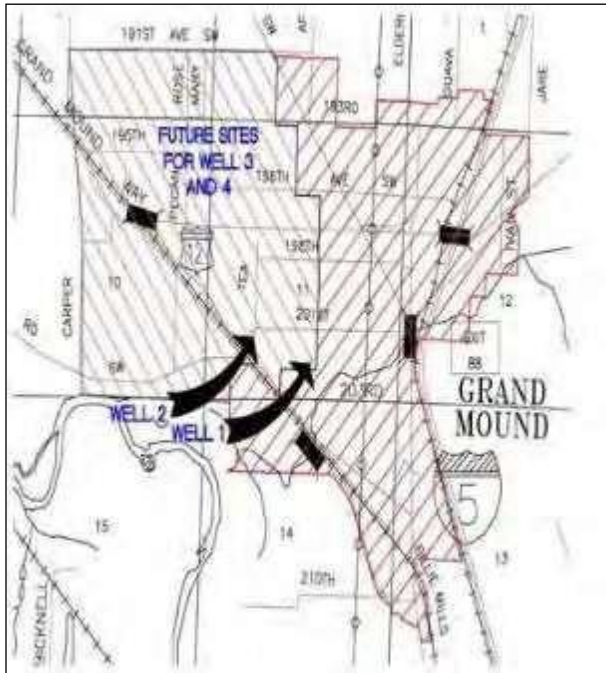
JUSTIFICATION (Need/Demand): Increased demand and regulatory compliance NPDES No. WA0042099. Continued growth in the Grand Mound UGA and due to the age of the vacuum sewage collection system components, the system will need to be upgraded.

IMPLICATION OF NOT DOING THE PROJECT(S):

Department of Ecology may levy violations, fines, or impose a moratorium on growth if compliance with the NPDES permit is not maintained.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Grand Mound Sewer and Water Infrastructure Improvement Program



DESCRIPTION: Development of a program to maintain and improve the existing water and sewer infrastructure (wells, pumps, piping, equipment, etc.).

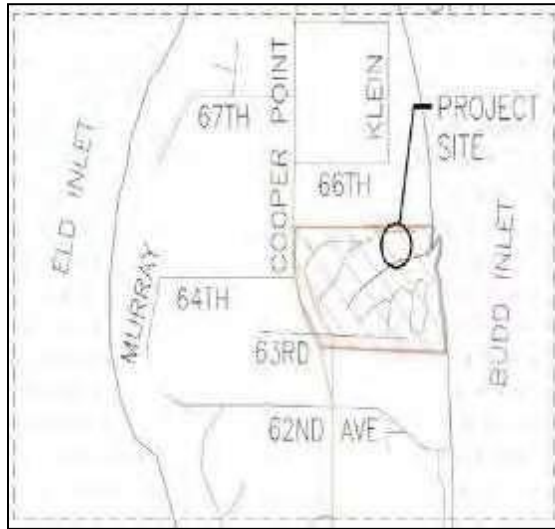
LOCATION: Grand Mound service area.

JUSTIFICATION (Need/Demand): Increased demand and regulatory compliance NPDES No. WA0042099. Continued growth in the Grand Mound UGA and due to the age of the system.

IMPLICATION OF NOT DOING THE PROJECT(S): Department of Ecology may levy violations, fines, or impose a moratorium on growth if compliance with the NPDES permit is not maintained.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Tamoshan Wastewater Treatment Plant and Pump System



DESCRIPTION: Replace failing sewer lift station pump and motor.

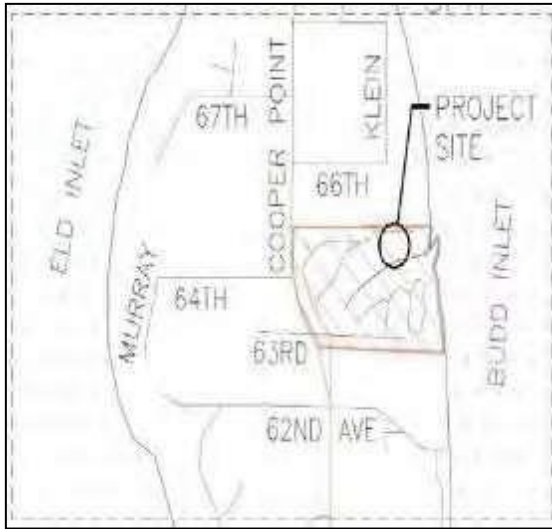
LOCATION: Beverly Beach Lift Station

JUSTIFICATION (Need/Demand): The existing sewer pump is operating out of normal duty cycles due to the pump age and need for a replacement.

IMPLICATION OF NOT DOING THE PROJECT(S): This lift station collects all the sewage from the Beverly Beach homeowners association and pumps it to the WWTP in Tamoshan. A violation could occur if the pump fails.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Tamoshan Water Treatment System



DESCRIPTION: Provide filtration treatment to the current water system to meet DOH requirements.

LOCATION: 2349 63rd NW.

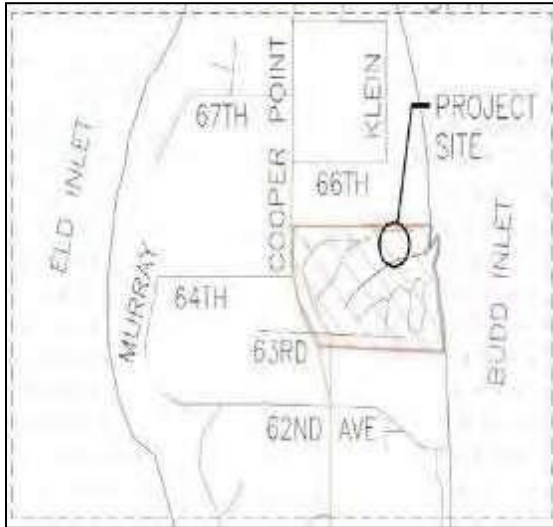
JUSTIFICATION (Need/Demand): The Tamoshan water treatment does not currently use filtration. Installation of a filtration system will ensure full year-round compliance with primary and secondary treatment standards.

IMPLICATION OF NOT DOING THE PROJECT(S):

Continue distributing water that may approach allowable limits for primary and secondary treatment limits. Regulatory agency may levy violations, fines, and impose additional conditions to the operating permit.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Tamoshan Sewer I & I Repair/Upgrades



DESCRIPTION: Tamoshan/Beverly Beach sewer has high inflow and infiltration (I&I) of surface water during rain events that exceed the plant limitations. Assess the collection system for I&I and make repairs to limit I&I entering the WWTP.

LOCATION: 2349 63rd Ave NW Sewer Collection System

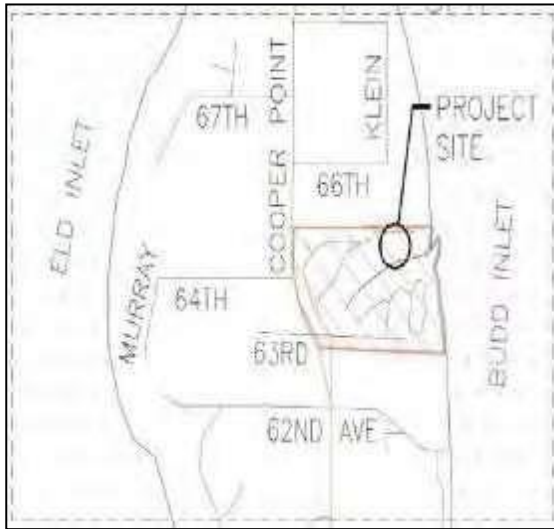
JUSTIFICATION (Need/Demand): I&I is limiting the WWTP treatment efficiency and capacity, increasing the ongoing operational costs, and may lead to potential exceedances of the operating permit conditions.

IMPLICATION OF NOT DOING THE PROJECT(S):

Department of Ecology may levy fines if the county does not take the steps to comply with the NPDES permit.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Tamoshan Generator Replacement



DESCRIPTION: Replace existing generator and evaluate backup power alternatives.

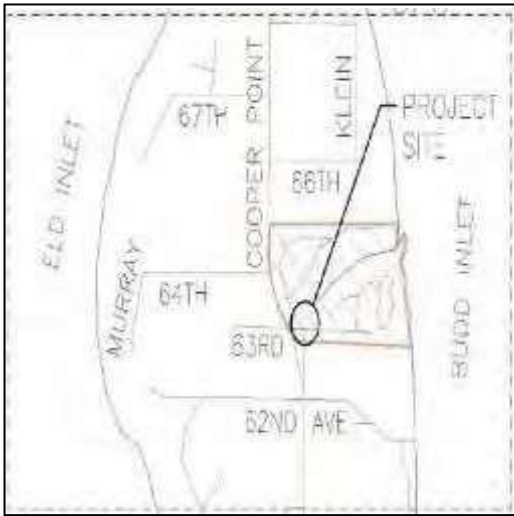
LOCATION: 2033 Beverly Beach Drive

JUSTIFICATION (Need/Demand): Existing generator is beyond current life expectancy. Emergency backup power will continue to ensure reliable sewer service to the residents of Beverly Beach and will keep raw sewage from going into the bay in the event of a power outage.

IMPLICATION OF NOT DOING THE PROJECT(S):
Department of Ecology may levy fines if the county does not take the steps to comply with the NPDES permit.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Tamoshan Sewer and Water Infrastructure Improvement Program



DESCRIPTION: Develop a sewer and water infrastructure program to maintain, repair, and replace failed and aging infrastructure.

LOCATION: Tamoshan system wide.

JUSTIFICATION (Need/Demand): The existing infrastructure was constructed over 20 years ago and is reaching its life expectancy.

IMPLICATION OF NOT DOING THE PROJECT(S): The water and sewer system may experience periodic disruptions in service to customers, a decreased treatment capacity and efficiency, and potential

violations of the operating permits, if infrastructure is not adequately maintained, repaired, and/or replaced prior to critical failure.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Boston Harbor Water Treatment System Upgrades



DESCRIPTION: Upgrade the water treatment filtration process, install well source meters, and upgrade the generator power switch including a potential building expansion.

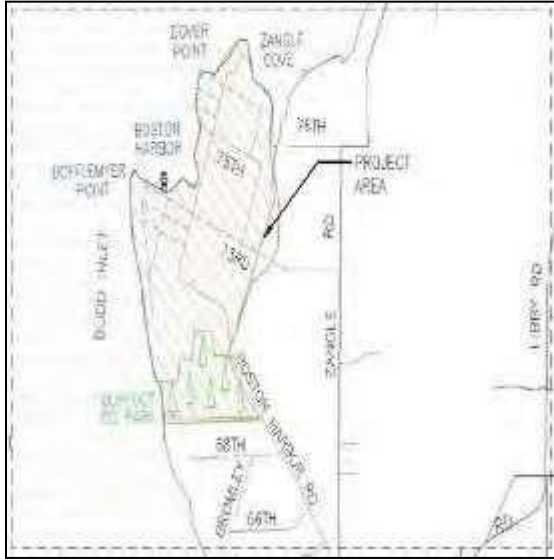
LOCATION: Boston Harbor School Corner of Zangle and 73rd ave. NE.

JUSTIFICATION (Need/Demand): The filter media needs to be replaced with high hydraulic loading rate filter media to insure year-round operation during peak water demand periods. The source wells need to be metered in accordance with a DOH permit requirement. The current backup generator needs to be hard-wired into the electrical panel for quick connection and startup during a power outage and potentially the building may need to be expanded to accommodate equipment storage.

IMPLICATION OF NOT DOING THE PROJECT(S): Current operation requires bypassing the filtration process during peak water demand periods which increase the likelihood of a permit limit exceedance. The source metering is a requirement of DOH and could result in a potential violation of the permit if not installed. The current response time for bringing the backup generator and system online is limited by the lack of a permanent electrical connection and equipment storage space. Delays could result in a potential permit violation.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Boston Harbor Wastewater Treatment Plant Upgrades



DESCRIPTION: Replace an outdated generator with newer more efficient model and conduct an electrical system upgrade to accommodate the new generator.

LOCATION: Boston Harbor WWTP located at 7126 Boston Harbor Road.

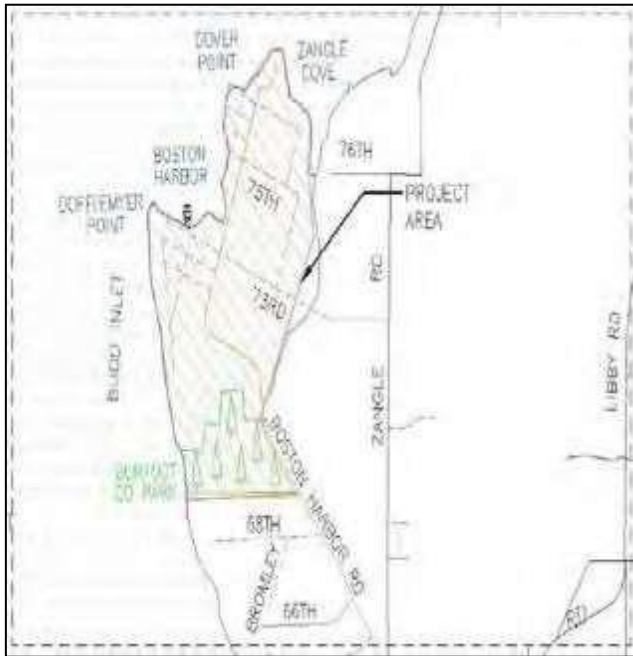
JUSTIFICATION (Need/Demand): The existing generator was purchased used for this utility and has become outdated. Parts are no longer available, repairs are more frequent and costly, and the unit is not efficient compared with newer units.

IMPLICATION OF NOT DOING THE PROJECT(S):

Increased cost to operate the Boston Harbor wastewater plant and possible failure during a power loss.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Boston Harbor Sewer System Program



DESCRIPTION: Repair or replacement of failed, failing and obsolete STEP system force main components.

LOCATION: Boston Harbor School Corner of Zangle and 73rd Avenue NE.

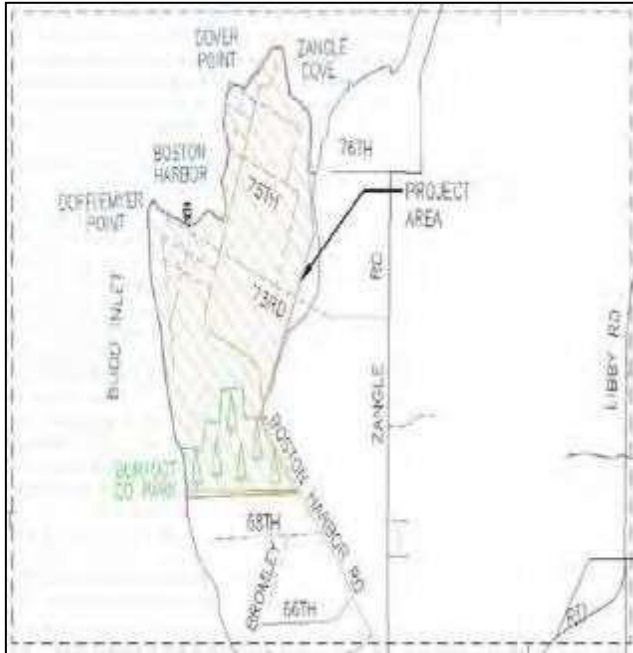
JUSTIFICATION (Need/Demand): Needed to maintain compliance with Ecology issued NPDES Permit and Health Department Regulations. Spill hazard and compliance issues.

IMPLICATION OF NOT DOING THE PROJECT(S):

Increased cost to operate the Boston Harbor sewer system due to incremental repairs and potential emergency callouts for breaks.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Boston Harbor Sewer & Water Infrastructure Improvement Program



DESCRIPTION: Develop a sewer and water infrastructure program to maintain, repair, and replace failed and aging infrastructure.

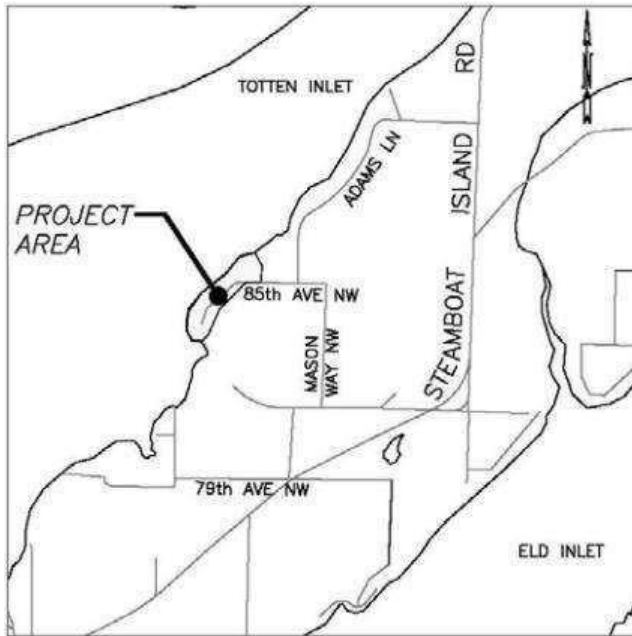
LOCATION: Boston Harbor entire service area.

JUSTIFICATION (Need/Demand):
The existing infrastructure was constructed is reaching or is already beyond its life expectancy.

IMPLICATION OF NOT DOING THE PROJECT(S): The water and sewer system may experience periodic disruptions in service, a decreased treatment capacity and efficiency, and potential violations of the operating permits if infrastructure is not adequately maintained, repaired, and/or replaced prior to critical failure.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Olympic View STEP Tank Repair/Replace



DESCRIPTION: Repair or replacement of failed, failing and obsolete STEP system force main components.

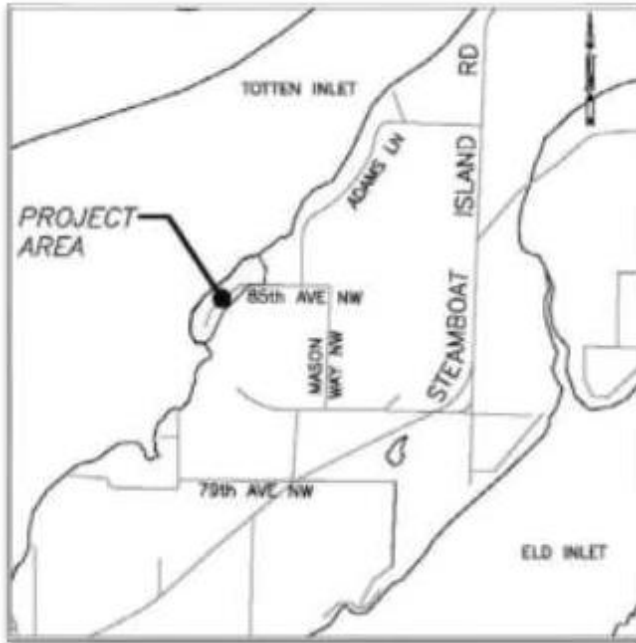
LOCATION: Olympic View service area.

JUSTIFICATION (Need/Demand): Needed to maintain compliance with Ecology issued NPDES Permit and Health Department Regulations.

IMPLICATION OF NOT DOING THE PROJECT(S): Increased cost to operate the Olympic View system due to incremental repairs and potential emergency callouts for breaks. Spill hazard and compliance issues.

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

Olympic View Drainfield and Filter System Program



DESCRIPTION: Improve and expand community drainfield, modernize STEP Tank Pumps, Control Boxes, replace lids and construct new cover over electrical components.

LOCATION Olympic View community, located on 85th Ave. NW.

JUSTIFICATION (Need/Demand) The existing STEP systems were installed over 15 years ago. Portions of the collection system should be replaced due to the age and type of original pipe materials used. The drainfield soils and design are not ideal and would not be approved today. May be required to bring drainfield up to current standards to meet DOH required permit.

IMPLICATION OF NOT DOING THE PROJECT(S): Increased cost to operate and maintain the Olympic View Utility

LINKS TO OTHER PROJECTS OR FACILITIES: n/a

CHAPTER 7 - GENERAL COUNTY GOVERNMENT FACILITIES

The 2019 inventory of the general government facilities that serves the county is 811,409 sq. ft. This inventory is shown below.

Table 7-1 Existing Inventory

Facility Name	Location	Capacity or size
Tilley Block Building	Tilley Rd	N/A
Tilley Sand Shed	Tilley Rd	3,363 sq ft
Tilley Bldg A-Administration	Tilley Rd	21,767 sq ft
Tilley Bldg B-Traffic	Tilley Rd	12,619 sq ft
Tilley Bldg C-Public Works	Tilley Rd	24,070 sq ft
Tilley Bldg D-Storage	Tilley Rd	11,400 sq ft
Tilley Bldg E-EOC	Tilley Rd	11,619 sq ft
Roads Littlerock Equip. Bldg.	Littlerock	936 sq. ft.
Roads Rainier Equip. Bldg.	Rainier	2,100 sq. ft.
Roads Rochester Equip. Bldg.	Rochester	2,100 sq. ft.
Heritage Hall	Fairground	9,120 sq. ft
Benoschek Building	Fairground	4,392 sq. ft
Deck Building	Fairground	2,560 sq. ft
Fir Building	Fairground	2,528 sq. ft
Sharp Building	Fairground	2,528 sq. ft

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Facility Name	Location	Capacity or size
Craft and Hobby	Fairground	6,216 sq. ft
Lake Building	Fairground	3,200 sq. ft
Food Court	Fairground	2,800 sq. ft
Deschutes Grange	Fairground	912 sq. ft
Restroom Buildings	Fairground	1,702 sq. ft
Caretakers Residence	Fairground	840 sq. ft.
Exposition Hall	Fairground	7,000 sq. ft.
All sheds and booths	Fairground	3,271 sq. ft.
All Barns	Fairground	48,600 sq. ft.
Courthouse Bldg. 1	Olympia	45,421 sq. ft.
Courthouse Bldg. 2	Olympia	35,914 sq. ft. Superior Ct.: 6 Ctrms.
Courthouse Bldg. 3	Olympia	74,471 sq. ft. Jail: 266 beds Dist. Ct.: 3 Ctrms
Courthouse Bldg. 4	Olympia	17,622 sq. ft.
Courthouse Bldg. 5	Olympia	22,000 sq. ft.
Courthouse Bldg. 6	Olympia	9,050 sq.ft
Evaluation and Treatment Center	Olympia	20,050 sq. ft.
Ferguson-Triage	Tumwater	10,800 sq. ft.
Ferguson-Work Release	Tumwater	10,945 sq. ft.

Juvenile Justice Center	Tumwater	82,000 sq. ft. in 4 Ctrms.; Detention: 80 beds; Day Detention: 40-80
Emergency Services Center	Olympia	17,997 sq. ft.
Facility Name	Location	Capacity or size
Public Health and Social Service Building	Olympia	25,836 sq. ft.
Coroner Facility	Tumwater	6,950 sq. ft.
Thurston County Corrections Facility	Tumwater	100,000 sq. ft.
Elections 2905-29th Ave SW	Tumwater	10,770 sq. ft.
Records Center	Tumwater	10,000 sq. ft.
Drug Court / Bristol Court	Olympia	5,008 sq. ft.
Family Support Center	Olympia	1,000 sq. ft.
Sheriff Storage-New Market	Tumwater	28,860 sq. ft.
2500 Mottman Facilities Shop/Storage	Olympia	11,200 sq. ft.

Future Needs

Chapter 6 of the Thurston County Comprehensive Plan does not contain level of service standards for general government facilities. Maintenance and Space Needs Assessment Plans inform the projects needed and prioritization, based on goals and policies supportive of providing safe, secure, accessible, and functional County facilities.

Proposed Improvements

Improvement and maintenance projects on general government facilities and sites over the six-year planning period total approximately \$107 million as shown in table 7-2. General descriptions and location of the proposed projects can be found on pages below.

Table 7-2 General County Government Facilities Proposed Projects and Funding

REVENUES FOR PROJECTS Fund Source	2021	2022	2023	2024	2025	2026	6-Yr. Total
Bond-Future	\$500,000	\$5,000,000	\$51,000,000	\$0	\$0	\$0	\$56,500,000
Real Estate Excise Tax	\$3,650,000	\$16,000,000	\$0	\$0	\$0	\$20,000,000	\$39,650,000
Central Service Building Reserve	\$1,622,000	\$1,160,000	\$800,000	\$700,000	\$1,900,000	\$700,000	\$6,882,000
Trial Court Improvement Fund	\$0	\$0	\$0	\$100,000	\$0	\$1,200,000	\$1,300,000
Grant	\$1,500,000						\$1,500,000
Road Fund	\$1,335,000	\$0	\$0	\$0	\$0	\$0	\$1,335,000
TOTALS	\$8,607,000	\$22,160,000	\$51,800,000	\$800,000	\$1,900,000	\$21,900,000	\$107,167,000

EXPENDITURES FOR PROJECTS Project Name	Fund Source	Urban Growth Area	2021	2022	2023	2024	2025	2026	6 Yr. Total
Tilley Campus Sand & Material Shed	CRF	Rural Thurston County	\$1,080,000						\$1,080,000
Tilley South Parking Lot	CRF	Rural Thurston County	\$255,000						\$255,000
Bldg 5 Parking Lot	CSRF	Olympia UGA	\$150,000						\$150,000
Tilley Bld E HVAC improvements	CSRF	Rural Thurston County	\$150,000						\$150,000
Tilley Power System Improvements	CSRF	Rural Thurston County	\$147,000						\$147,000
Courthouse Building 3 Secured Entrance	CSRF	Olympia UGA	\$225,000	\$10,000					\$235,000
County Wide Security Improvements	REET	Rural Thurston County	\$800,000						\$800,000
TCCF Roofing & Stucco Repair	CSRF	Tumwater UGA	\$350,000						\$350,000
Fairgrounds Bld Infrastructure Improvements	REET	Lacey UGA	\$250,000						\$250,000
TCCF Recreation Yard	CSRF	Tumwater UGA	\$200,000						\$200,000

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Jail Flex Unit Construction	REET	Tumwater UGA	\$2,500,000	\$16,000,000	\$6,000,000				\$24,500,000
Family and Juvenile Court Hydronic Repairs	CSRF	Tumwater UGA	\$50,000	\$450,000					\$500,000
Bldg 6 Roof Repair	CSRF	Olympia UGA	\$50,000	\$300,000					\$350,000
CSA Expansion	Grant	Tumwater UGA	\$1,500,000						\$1,500,000
Thurston County Courthouse Infrastructure Upgrades	BF	Olympia UGA	\$500,000	\$5,000,000	\$45,000,000				\$50,500,000
TCCF IT Room AC Upgrades	CSRF	Tumwater UGA		\$50,000	\$250,000				\$300,000
Bldg 4 Sewer Repair	CSRF	Olympia UGA		\$50,000	\$100,000				\$150,000
TCCF Camera Upgrade	CSRF	Tumwater UGA					\$1,600,000		\$1,600,000
Family and Juvenile Court Improvements	TCI	Tumwater UGA						\$1,200,000	\$1,200,000
Emergency Services Center Roof Replacement	CSRF	Olympia UGA				\$400,000			\$400,000
Bldg 6 HVAC Replacement	CSRF	Olympia UGA						\$400,000	\$400,000
Bldg 3 Courtroom Improvements	TCI	Olympia UGA				\$100,000			\$100,000
Land Acquisition	REET	Olympia UGA						\$20,000,000	\$20,000,000
Tilley Pump House Improvements	CSRF	Rural Thurston County			\$150,000				\$150,000
Bldg 4 Resource Room	REET	Olympia UGA	100,000						\$100,000
Major Maintenance	CSRF	LOT Urban	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,800,000
TOTALS			\$8,607,000	\$22,160,000	\$51,800,000	\$800,000	\$1,900,000	\$21,900,000	\$107,167,000

Light grey shading, normal font - closeout project

Medium grey shading, bold font - construction project

Black shading, white font - engineering project

Legend:

CRF - County Road Fund

CSRF - County Service Building Reserve

REET- Real Estate Excise Tax

Grant - State Department of Commerce Long Term Behavioral Health Grant

TCI - Trial Court Improvement Fund

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Tilley Campus Sand & Material Storage (25567)



DESCRIPTION: This project will construct a new sand and material storage structure large enough to meet the storage needs for roads maintenance for the road crews. Cutting, filling, and pavement to support the immediate infrastructure. Upgrade and/or add utilities to support materials storage structure. Removal of the existing material storage shed and restoration of the existing site consistent with planning and permitting authority requirements.

JUSTIFICATION (Need/Demand):

Project Scope-Public Work's existing sand and material storage shed has been identified as being too close to a wetland area. It is too small for anticipated operational needs and distant from other heavy equipment operations, resulting in inefficient operations and traffic safety issues on site.

LOCATION: 9605 Tilley Road South, Olympia, WA 98512.

IMPLICATION OF NOT DOING THE PROJECT: Not proceeding will limit the ability of the County to meet its operational needs and puts the County at risk of a Storm Water Pollution Prevention Plan violation finding from the Department of Ecology.

LINKS TO OTHER PROJECTS OR FACILITIES: Tilley Campus Traffic Safety Improvements.

Tilley Campus South Parking Lot (25603)



DESCRIPTION:

This project will design and construct all elements of additional parking for current and future needs. Lighting, stormwater and other necessary infrastructure will be included to support the parking area.

JUSTIFICATION (Need/Demand):

The County is growing in population and this supports the additional work that needs to occur on County infrastructure that is the responsibility of the Public Works Department. This adds staff and their personal vehicles and County equipment and vehicles.

In addition to Public Works, this site supports the activities of the ER&R department which provides vehicles and equipment acquisition and maintenance County wide. A large area of the existing parking spaces is allocated to support this County wide effort.

LOCATION: 9605 Tilley Road S, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT:

Staff and County vehicles will not have parking to support the activities of the Public Works department, and the lack of additional parking could negatively impact the capacity of ER&R to support vehicle needs for the rest of the County.

LINKS TO OTHER PROJECTS OR FACILITIES: Tilley Campus Sand & Materiel Storage, Tilley Campus Traffic Safety Improvements.

Building 5 Parking Lot (25595)



DESCRIPTION:

This project is the removal of existing asphalt and replacement of new asphalt parking lot.

JUSTIFICATION (Need/Demand):

Project scope-This project is the removal and replacement of the existing asphalt paving that has reached the end of its lifecycle.

LOCATION: 2400 Evergreen Park Dr. SW, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S): Parking lot asphalt is in disrepair and is a trip hazard and could cause a litigation for the County.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A

Emergency Management Building E HVAC Improvements



DESCRIPTION:

The project will improve air handling equipment to limit smoke infiltration into the building.

Project Scope – Modify the air handling equipment so that smoke from burning projects adjacent to the facility is filtered out of incoming air. This project will provide quality air for an essential county building.

This project does not include replacement of the existing equipment.

JUSTIFICATION (Need/Demand):

This building and the essential activities that occur in this building must operate without impact from exterior events. It is located immediately adjacent to an area where burning is legally conducted at various times throughout the year.

LOCATION: 9521 Tilley Road S, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT:

Staff will continue to be negatively impacted by the events occurring outside of the building that permeate the building air. Adjustments of the current equipment does not solve the condition.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A

Tilley Power System Improvements (25539)



DESCRIPTION:

This project is for the installation of a new generator to run the brine and water system in the event of a power outage and the assessment of power need of ER&R shops.

Project Scope – Purchase and install a new generator to run water systems and brine operations in the event of a power outage. And to assess power loads on existing infrastructure and determine the needs for existing tenants and their future expansion.

LOCATION: 9605 Tilley Road S, Olympia, WA 98502

JUSTIFICATION (Need/Demand): The existing generator that is on site to run Tilley Campus emergency operations does not currently include the water or brining system.

IMPLICATION OF NOT DOING THE PROJECT: Not doing the project could affect the ability of Public Works to run brining operations or have running water for the facility in the event of a power outage.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A

Courthouse Building #3 Secured Entrance (25584)



DESCRIPTION: This project will potentially construct an expanded secured entry for Building #3, as recommended in the 2014 SNAP Study.

JUSTIFICATION (Need/Demand):

Project Scope- The Courthouse Campus was built in 1978 and at that time security and design needs were not the same as they are today. The entry and lobby area of Building 3 creates a choke point for security screening. This creates the possibility for a potential safety problem due to the confined area in which screening takes place.

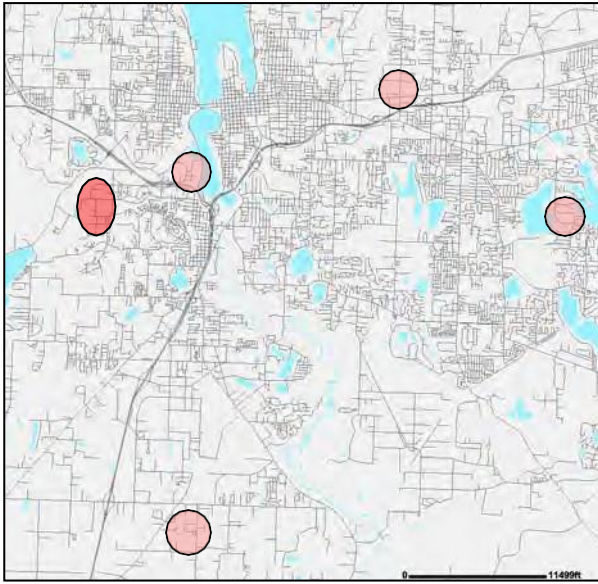
LOCATION: 2000 Lakeridge Dr. SW, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

If the entry is not changed it will continue to cause safety risks for both the public and the staff creating a very stressful environment.

LINKS TO OTHER PROJECTS OR FACILITIES: Courthouse and Regional Administrative Building, Thurston County Courthouse Infrastructure Improvements, Building 3 Court Improvements

County-Wide Security Improvements (25571)



DESCRIPTION:

Develop a plan and projects to assess, improve and standardize critical security infrastructure throughout County facilities for workplace and public safety.

Project Scope: Conduct the planning, design, installation, and configuration of standardized security systems and supporting infrastructure in order to meet needs of tenants at the following facilities in priority order: Courthouse Buildings 5 and 6; Emergency Services Center; Public Health Building; Family Justice Center; Fairgrounds, Coroner; Tilley Campus Buildings A through E. Conduct a needs assessment and develop a plan for proposed improvements. Identify viable funding resources. Determine sequence and timeline for

improvements. Advise County leaders in reviewing and/or establishing supporting operational policies and procedures. Project components may include:

- Door Access Control/Card Key Systems
- Duress Alarms & Mass Notification Systems
- Security Camera Systems
- Intrusion Detection Systems
- Minor Structural Modifications to Enhance Physical Security.

LOCATION: County facilities at 2400 Evergreen Park Drive, 926 24th Way, 2703 Pacific Avenue, and 412 Lilly Road in Olympia, 3054 Carpenter Road in Lacey, 2801 32nd Avenue in Tumwater, and 9605 Tilley Road in rural Thurston County.

JUSTIFICATION (Need/Demand): County facilities security systems and infrastructure have been added ad hoc as resources could be identified. The result is an inconsistent and incomplete patchwork of aging systems, equipment, and technologies that fail to meet contemporary security needs. Security incidents and drills have shown the need for better security systems and infrastructure. A plan to deploy more integrated and standardized security tools across County facilities is needed to assure public and employee safety. In 2015, the County completed a study to evaluate security vulnerabilities of certain Courthouse buildings and recommend operational and/or system improvements. This has informed projects in 2016-18 to improve security for Buildings 1-4 at the Courthouse and will inform other County-wide security improvements.

IMPLICATION OF NOT DOING THE PROJECT: Continuing risk of injury or possible loss of life to employees and the public; continued financial losses and service disruptions due to thefts and vandalism.

Thurston County Correction Facility (TCCF) Roofing and Stucco Repair (25605)

DESCRIPTION:

Repairs to the current roof, flashing and stucco. This project would prevent further damage to the facility.

JUSTIFICATION (Need/Demand):

Project Scope – This project would include resealing roof penetrations and flashing along with adding downspouts to avoid water from running down the side of the facility.

LOCATION: 3491 Ferguson St. SW, Tumwater, WA 98512

IMPLICATION OF NOT DOING THE PROJECT(S): Without doing this project water will continue to penetrate the building, causing damage to the interior walls and ceiling of



the facility.

LINKS TO OTHER PROJECTS OR FACILITIES: TCCF Expansion Project, TCCF IT Room AC Upgrades, TCCF Recreation Yard, TCCF Recreation Yard

Fairgrounds Building Infrastructure Improvements (25560)



DESCRIPTION: This project will make building infrastructure improvements at the Thurston County Fairgrounds and Events Center.

JUSTIFICATION (Need/Demand):

Project Scope- Some Fairgrounds and Events Center buildings, structures, and amenities are aging and/or limited in their usability. The County and Fair Boards intend to make capital improvements that will enhance the ability of the site to host more events and increase overall revenue.

LOCATION: 3054 Carpenter Road SE, Lacey, WA 98503

IMPLICATION OF NOT DOING THE PROJECT(S):

The Fairgrounds would not have an improvement to the site which would improve its operations and usage, as well as its ability to generate revenue.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A

Thurston County Correction Facility (TCCF) Recreation Yard (25607)



DESCRIPTION:

The Thurston County Correction Facility (TCCF) does not have a recreation yard for the female population, this project will create a recreation yard in the sally port area of the facility.

JUSTIFICATION (Need/Demand):

Project Scope – This project would create a fenced and roofed secured enclosure in the Sally Port with intercom and camera surveillance equipment that will run to the transfer station in the intake area for the TCCF.

LOCATION: 3491 Ferguson St. SW, Tumwater, WA 98512

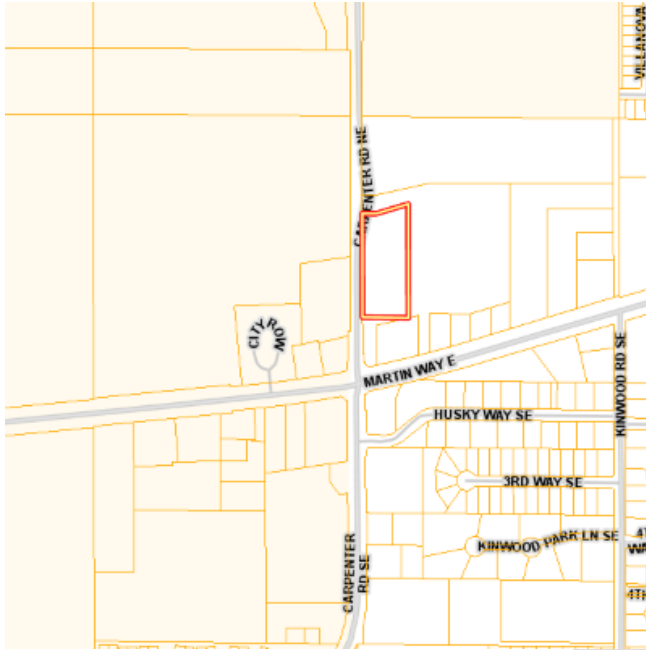
IMPLICATION OF NOT DOING THE PROJECT(S):

Without doing the project the female population will not

have proper treatment and puts the County at risk of legal action.

LINKS TO OTHER PROJECTS OR FACILITIES: TCCF Expansion Project, TCCF IT Room Upgrades, TCCF Roofing & Stucco Repair, TCCF Recreation Yard

Carpenter Road Transition Center Site Development



DESCRIPTION:

Conduct the planning, design, and construction of infrastructure improvements to the site.

JUSTIFICATION (Need/Demand):

Project Scope – Thurston County needs a safe and secure site for individuals, to help transition back into everyday society

LOCATION: 440 Carpenter Rd SE, Lacey, Wa. 98503

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will limit the abilities the county has to help with the homeless population in the county.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A

Family Justice Center Hydronic Heating System Repair (25611)



DESCRIPTION:

This project would replace the current heating loop piping and hard lid ceiling.

This will include the replacement of current grooved pipe connections with new welded in place pipe connections. Along with adding an accessible ceiling for future issues. We do not anticipate any redesign of the current system.

JUSTIFICATION (Need/Demand):

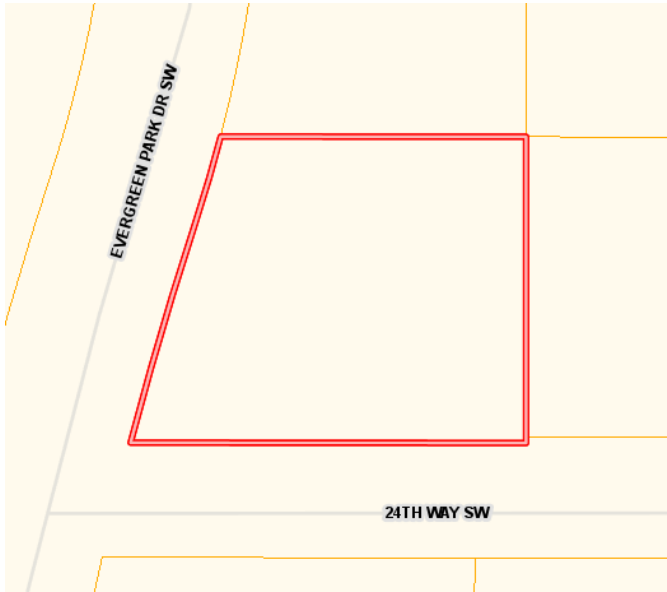
Project Scope- The current heating loop is failing, it is currently experiencing leaks due to the old connections failing, causing damage to existing ceiling and walls. The areas of concern do not currently allow access to the heating loop piping.

LOCATION: 2801 32Nd Avenue SW, Tumwater, WA 98512

IMPLICATION OF NOT DOING THE PROJECT(S): As the system continues to age more leaks will develop, continuing to cause more damage to the current facility. In the event of a major failure it would cause disruptions to the heating system for the courts and detention.

LINKS TO OTHER PROJECTS OR FACILITIES: Family and Juvenile Court Improvements

Building 6 Roof Repair (25612)

**DESCRIPTION:**

This project is the removal of existing roofing and the replacement with new composition and PVC

JUSTIFICATION (Need/Demand):

Project Scope – The roofing both composition and torch down has reached the end of its useful life and needs to be replaced with new composition and PVC roofing and flashings.

LOCATION: 926 24th Way, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will put the facility in danger of water damage due to water penetrating the facility.

LINKS TO OTHER PROJECTS OR FACILITIES:

Public Defense Upgrades and the County Wide Security Upgrades, Building 6 HVAC Replacement

CSA Building Triage Expansion (25578)



DESCRIPTION:

This project is a six-bed expansion of the exiting Thurston -Mason County Mental Health Triage Center

JUSTIFICATION (Need/Demand):

Project Scope – The project is a 2,000 square foot, six bed expansion of the existing Thurston-Mason County Mental Health Triage Center. It will be funded by a Department of Commerce grant.

LOCATION: 3825 Ferguson St. SW, Tumwater, WA 98512

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing the project will put pressure on the Thurston County Correctional Facility and will

limit the County's ability to help public at large.

LINKS TO OTHER PROJECTS OR FACILITIES: TCCF Expansion Project

Thurston County Courthouse Infrastructure Upgrades (25610)

**DESCRIPTION:**

The Building Condition Assessment completed by MENG analysis identified structure, equipment and systems that have exceeded their lifespan. They require major repair or replacement.

JUSTIFICATION (Need/Demand):

Project Scope – This project is needed to allow safe and continuous occupancy of the site, along with meeting the space needs of county departments. It also will assure that current safety rules and standards are met.

LOCATION: 2000 Lakeridge Dr. SW, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will leave both staff and the public in a potentially unsafe and stressful environment. It also leaves the building systems at risk of catastrophic failure, which may make the buildings unusable until the systems are repaired.

LINKS TO OTHER PROJECTS OR FACILITIES: Building 3 Courtroom Improvements, Building 3 Secured Entrance

Thurston County Correction Facility (TCCF) IT Room AC Upgrades (25609)



DESCRIPTION:

The project would include the replacement of the current cooling system for the data room

JUSTIFICATION (Need/Demand):

Project Scope – The current cooling system is at the end of its useful life and facing imminent failure.

LOCATION: 3491 Ferguson St. SW, Tumwater, WA 98512

IMPLICATION OF NOT DOING THE PROJECT(S): Failure to proceed with this project will lead to failure of the current cooling system. This will cause the IT equipment located in

the room to overheat and fail. If failure of the equipment occurs, systems at the facility will be inoperable.

LINKS TO OTHER PROJECTS OR FACILITIES: TCCF Expansion Project, TCCF Roofing & Stucco, TCCF Recreation Yard, TCCF Camera Upgrade

Courthouse Building #4 Sewer Improvement (25613)



DESCRIPTION: This project will replace the existing incoming sewer line, with a new line to the current facility.

JUSTIFICATION (Need/Demand):

Project Scope – The existing sewer line is partially collapsed. Causing sewage to back up at times.

LOCATION: 929 Lakeridge Dr. SW, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will lead to failure of the current sewer line. When this occurs, there will be no bathroom facilities available for use on the site therefore not allowing the building to be occupied.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A

TCCF Camera System Upgrade(25F04)



DESCRIPTION:

This project would replace the current analog camera system with a new IP based camera system.

JUSTIFICATION (Need/Demand):

Project Scope – The current camera system is at the end of its lifespan. Procuring cameras and support for the current system has proven to be difficult. The camera system is an important piece to the operation of the facility, along with providing safety for the staff and inmates.

LOCATION: 3491 Ferguson St. SW, Tumwater, WA 98512

IMPLICATION OF NOT DOING THE PROJECT(S):

Not completing this project puts the operations & staff at a major risk if the current system fails and is not repairable.

LINKS TO OTHER PROJECTS OR FACILITIES: TCCF Expansion Project, TCCF IT Room Upgrades, TCCF Roofing & Stucco Repair, TCCF Recreation Yard

Family Justice Center Space Improvements (25F07)



DESCRIPTION:

This project will potentially remodel a portion of the Family and Juvenile Justice Center for Tenants who occupy portions of the building.

JUSTIFICATION (Need/Demand):

Changes in operations will require evaluation of existing spaces to ensure the space available for emerging program needs. This is to provide funding for preliminary design to determine if existing space can accommodate those need.

LOCATION: 2801 32Nd Avenue SW, Tumwater, WA 98512

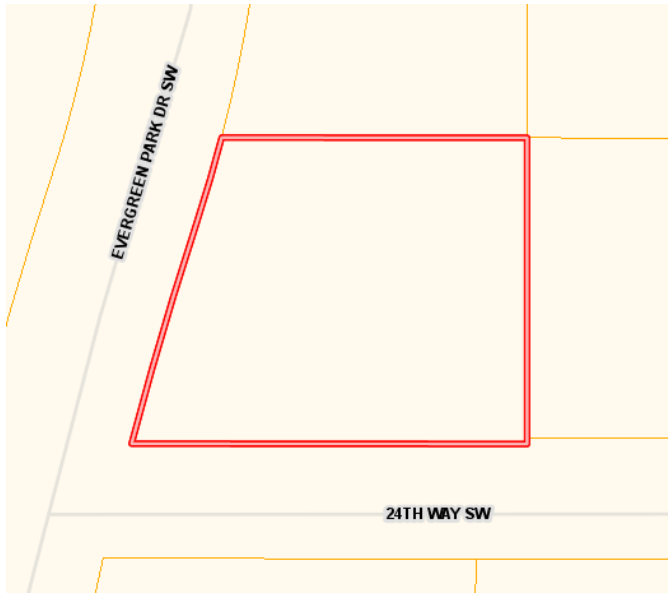
IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project may result in programs not operating as

efficiently and safely as may be needed.

LINKS TO OTHER PROJECTS OR FACILITIES: Family and Juvenile Court Hydronic Heating system repair

Building 6 Roof Repair (25612)



DESCRIPTION:

This project is the removal of existing roofing and the replacement with new composition and PVC

JUSTIFICATION (Need/Demand):

Project Scope – The roofing both composition and torch down has reached the end of its useful life and needs to be replaced with new composition and PVC roofing and flashings.

LOCATION: 926 24th Way, Olympia, WA 98502

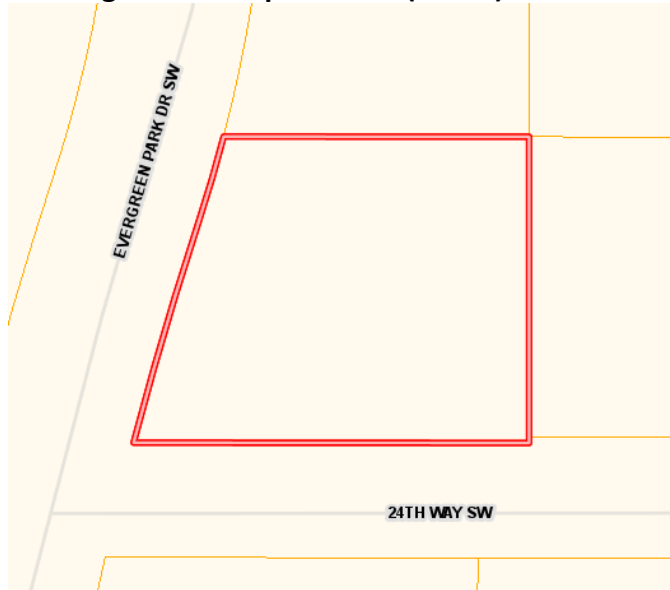
IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will put the facility in danger of water damage due to water penetrating the facility.

LINKS TO OTHER PROJECTS OR FACILITIES:

Public Defense Upgrades and the County Wide Security Upgrades, Building 6 HVAC Replacement

Building 6 HVAC Replacement(25F06)



DESCRIPTION:

This project is the removal and replacement of existing Heating Ventilation and Air Conditioning (HVAC) system at Building 6.

JUSTIFICATION (Need/Demand):

Project Scope – The existing system has reached the end of its practical life span; it is in a constant state of repair and the system is hard to get parts for. The replacement system will be much more energy efficient than the existing system

LOCATION: 926 24th Way, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will put system at risk of failure which could contribute to further damage to the building with possibility of plumbing system freezing in the winter.

LINKS TO OTHER PROJECTS OR FACILITIES: Public Defense Upgrades and the County Wide Security Upgrades, Building 6 roof repairs

Courthouse Building #3 Courtroom Improvements (25F08)



DESCRIPTION:

Conduct the planning, design, and construction of restructured space in building 3. This project will conduct a needs assessment and develop a plan of proposed improvements to meet near term requirements for the courts. This includes design and construction of an additional Courtroom and relocation of various departments within District Court to allow more effective operation of District Court within Building 3.

JUSTIFICATION (Need/Demand):

Project Scope – District court needs another courtroom to meet demand. District court is also in need of a restructuring of their current office space to house the employees within the department. These projects can include any aspect of

construction, heating, cooling, plumbing, electrical, and miscellaneous infrastructure to support the successful completion of the project.

LOCATION: 2000 Lakeridge Dr. SW, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will limit the timeliness and levels of service that District Court is charged with providing under the law to the public and would potentially leave both staff and the public in a potentially unsafe and stressful environment.

LINKS TO OTHER PROJECTS OR FACILITIES: Building 3 Secured Entrance, Thurston County Courthouse Infrastructure Improvements

Potential Property Purchase near Courthouse Campus(25F05)



DESCRIPTION:

Purchase of property near the current Courthouse Campus

JUSTIFICATION (Need/Demand):

Project Scope – This project represents the purchase of property near the current campus. This allows for the future expansion of the current campus as needed for courts or other departments.

LOCATION: 2000 Lakeridge Dr. SW, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project will limit the ability for

growth of the county departments. The current campus has a great need for more space.

LINKS TO OTHER PROJECTS OR FACILITIES: Thurston County Courthouse Infrastructure Improvements.

Tilley Pump House Improvements (25605)



DESCRIPTION:

Design and install new equipment in the wellhouse that provides domestic water for activities on the Public Work site and must meet onsite operational need.

Project Scope – This project will design and install new pumps, pressure tanks, and metering to ensure continued operation of the well.

The project is not scoped to drilling a new well or improving the existing wellhouse.

The current equipment is in excess of 25 years old. The industry standard for replacement of this type of equipment is 15 to 20 years. Regular maintenance is performed on this equipment, but there are already indications of failure of the pressure tanks contained within the wellhouse.

IMPLICATION OF NOT DOING THE PROJECT:

If a planned project isn't performed, it is likely one or more aspects of this equipment will fail at a time when it would significantly impact the operation of the Tilley Campus. It would be difficult to operate the Tilley Campus without a reliable source of domestic water.

LINKS TO OTHER PROJECTS OR FACILITIES: N/A

Courthouse Building #4 Resource Room (25615)



DESCRIPTION: This project will add a resource room for released inmates to use for access to community resources.

JUSTIFICATION (Need/Demand):

Project Scope – This project will add an area for released inmates to access resources that they may otherwise not have access to.

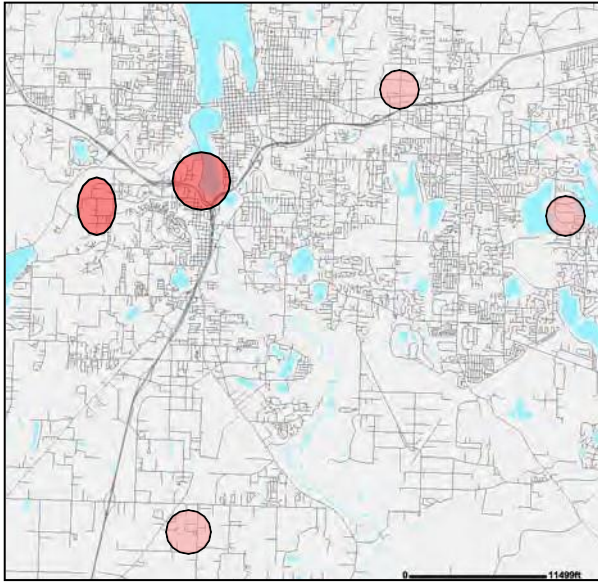
LOCATION: 929 Lakeridge Dr. SW, Olympia, WA 98502

IMPLICATION OF NOT DOING THE PROJECT(S):

Not doing this project may lead to inmates not having access to what is needed to help to transition back into society.

LINKS TO OTHER PROJECTS OR FACILITIES: Building 4 Sewer Repairs

Major Maintenance - Special Projects (25999)



DESCRIPTION:

Plan and conduct miscellaneous facilities maintenance and repair projects in response to emergent life safety and operational needs or regulatory obligations.

Upgrade or replace systems, structures, and equipment as the need arises to maintain current levels of use.

JUSTIFICATION (Need/Demand):

The 2016 Building Condition Assessment completed by MENG Analysis identified numerous systems, structures, and equipment at County facilities that have exceeded their useful life and will require repair and/or replacement due to debilitated condition. Many components are exhibiting some level of failure and are requiring stopgap repairs or replacement if stop-gap repairs are not successful.

LOCATION:

County facilities at 2000 Lakeridge Drive, 2400 Evergreen Park Drive, 926 24th Way, 2703 Pacific Avenue, and 412 Lilly Road in Olympia, 3054 Carpenter Road in Lacey, 2801 32nd Avenue in Tumwater, and 9605 Tilley Road in rural Thurston County and other buildings as necessary.

IMPLICATION OF NOT DOING THE PROJECT:

Not including special projects in the plan would limit the County's ability to address emergent, foreseeable needs, potentially disrupting vital County business operations. Failing to maintain buildings will cause accelerated decay and the eventual need for replacement. Failure to repair and renovate as well as failure to accommodate accessibility issues can place staff and the public at risk.

LINKS TO OTHER PROJECTS OR FACILITIES:

CHAPTER 8 – FACILITIES OF OTHER PUBLIC ENTITIES

Public facilities provided by other public entities in this section is provided for information only. The information is requested annually by Thurston County. The public entities listed are the most accurate source of up-to-date information on their capital facilities plans.

Table 8-1 includes the major public facility improvements planned by school districts, fire districts/authorities, port districts and transit entities that responded to Thurston County's request for information.

Table 8-1 Facilities of Other Public Entities

Projects (Name and Location of Each Capital Project)		6 Year Costs	Funding Source (For 6 year projects)
Project Name	Location		
Rainier School District #307			
Construction/modernizations	207 Centre St.	\$1,000,000	TBD
Mechanical/Lighting Upgrades at High School	308 Second St.	\$800,000	TBD
Rainier School District Total		\$1,800,000	
North Thurston School District #3			
New Construction	Varies	\$10,000,000	Bonds & voluntary mitigation
Modernizations	Varies	\$23,000,000	Bonds & state assistance
Facility Upgrades / Asset preservation	District wide	\$4,000,000	Bonds
Temporary Classrooms purchase (5 per year) and relocation	Varies	\$550,000	Bonds & voluntary mitigation
North Thurston SchoolDistrict Total		\$37,550,000	

Olympia School District			
Centennial Elementary School Modernization, Mini-Building of 10 Classrooms, and New Field	2637 45 th Ave SE Olympia	\$31,100,970	Bond Financing impact/mitigation fees
McLane Elementary School Modernization and Mini-Building of 10 Classrooms	200 Delphi Rd. SW	\$29,338,575	Bond Financing impact/ mitigation fees
Roosevelt Elementary School Modernization, Mini-Building of 10 Classrooms, and New Field	1417 San Francisco Ave. NE	\$26,595,910	Bond Financing impact/ mitigation fees
Capital High School Modernization and JAMS Pathway	2707 Conger Ave NW	\$37,985,256	Bond Financing impact/ mitigation fees
Olympia High School Addition and Portable Replacement	1302 North Street SE	\$28,282,547	Bond Financing impact/ mitigation fees
Avanti High School Modernization & Relocation of District Administrative Center	1113 Legion Way SE	\$17,718,048	Bond Financing impact/ mitigation fees
Small Works Roster Projects	Various	\$43,874,781	Secured local bonds and levy, impact / mitigation fees, and state match revenue
Olympia School District Total		\$214,899,087	

Rochester School District #401			
Construction/Modernization/Expansion	Rochester High School	\$52,000,000	Proposed bonds and state
Site acquisition and development	Various sites	\$3,000,000	Proposed bonds and impact fees
Temporary Classrooms & Safety Upgrades	Various sites	\$8,000,000	Mitigation and impact fees and capital project funds

Independence Park Upgrades	Independence Park 10140 Hwy 12	\$125,000	Community Development Block Grant
Rochester School District Total		\$63,000,000	
Tumwater School District #33			
Tumwater Hill Elementary Renovations	3120 Ridgeview Loop SW	\$250,000	Capital levy, bonds, grants
New Alternative Learning Center		\$100,000	Capital levy, bonds, grants
New Elementary School #7	To Be Determined	\$44,500,000	Proposed bonds/state grant, impact fees
New Market Skills Center – Major Renovations	7299 New Market St. SW	\$9,000,000	State grants and NMSC Capital Investment Funds
Bush Middle School Renovations	2120 83rd Avenue SW	\$23,100,000	Proposed bonds/state grant
Tumwater Middle School Renovations	6335 Littlerock Rd. SW	7,100,000	Proposed bonds/state grant
Tumwater High School Renovations	700 Israel Rd. SW	\$5,100,000	Secured and proposed bonds
Black Hills High School	7741 Littlerock Rd. SW	\$5,100,000	Secured and proposed bonds
Various Small Projects	Various Locations	\$33,140,000	Secured bonds and capital levy; impact fees, grants
Tumwater School District Total		\$127,390,000	

Yelm Community Schools District #2			
Southworth Elementary Replacement		\$43,075,000	Bond revenue/State Match
Yelm Middle School Replacement		\$46,760,000	Bond revenue/State Match
District Wide Safety Upgrades	Various	\$16,384,000	Bond revenue
Yelm High School Gym Roof Replacement		\$350,000	Impact Fees/General Fund Impact Fees/General Fund
Lackamas Elementary Double Classroom Portable		\$300,000	
Relocate 2 Double Classroom Portables from Southworth to Fort Stevens		\$150,000	Impact Fees/General Fund
District Wide Repairs (roofing/asphalt patch)		\$900,000	Impact Fees/General Fund
Transportation Vacant Building Renovation		\$1,000,000	Impact Fees/General Fund
Relocate Yelm Extension School		\$2,000,000	Impact Fees/General Fund
Renovation of YCS Administrative Offices		\$1,000,000	Impact Fees/General Fund
Yelm Community Schools Total		\$111,919,000	
Griffin School District #324			
Perimeter Fencing for School	6530 33 rd Ave. NW	\$50,000	Capital Projects Fund
Griffin School District Total		\$50,000	

West Thurston Regional Fire Authority			
No Capital Projects Reported			
South East Thurston Fire Authority			
Station #21 Remodel	708 Mill Road	\$750,000	Bond
Station #22 Remodel	17213 153 rd Ave. SE	\$750,000	Impact Fees
Station #41 Upgrade	12506 133 rd St. Rainier	\$1,500,000	Impact Fees
South East Thurston Fire Authority Total		\$3,000,000	
Fire District #5 & #9 McLane/Black Lake Fire Department			
No Capital Projects Reported			
Fire District #3 Lacey Fire Department			
New Station 34	8407 Steilacoom Rd SE	\$8,000,000	Bonds
Station 33 Addition	6500 Mullen Rd SE	\$1,500,000	Bonds
Repair Facility Additions	8447 Steilacoom Rd SE	\$1,500,000	Bonds
Fire District #3 Lacey Fire Department		\$11,000,000	
East Olympia Fire District #6			
Upgrade Fire Station #64 Training Facility	9530 Old Hwy 99	\$367,000	Bond
Fire District #6 Total		\$367,000	Bond

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Fire District #8, South Bay			
3349 South Bay Rd. NE: District Training Center Phase III	\$ 25,000	Capital Facilities Revolving Account	
5046 Boston Harbor Rd NE: Station 8-3 remodel	TBD	TBD	
5501 63rd Ave NE: District resident program housing and Station 8-2 replacement	TBD	TBD	
	\$ 25,000		
Fire District #12			
New Station 12-1	TBD	\$6,000,000,000	Bond
Remodel Station 12-2	21249 Bucoda Hwy SE, Centralia	\$50,000	Bond
Remodel Station 12-4	5405 Skookumchuck Rd SE, Tenino	\$100,000	Bond
Fire District #12 Total		\$6,150,000,000	Bond
Fire District #16, Rochester			
No Capital Projects Reported			
Fire District #17, Bald Hills			
Station 17-1 Remodel	16306 Bald Hill Rd. SE	\$ 300,000	To be Determined
Station 17-2 Upgrades	17701 Lawrence Lake Rd. SE	To be Determined	To be Determined
New Station	To be Determined	\$ 3,000,000	To be Determined
Fire District #17 Total		\$ 3,300,000	
Port of Olympia (last received update 2013)			
Airport Projects	Olympia Regional Airport	\$3,900,000	Federal and State grants and local funds

Marina and Boatworks	Swantown Marina and Boatworks	\$1,100,00	Federal and State grants and Local funds
Marine Terminal Projects	Port Marine Terminal	\$2,000,000	Federal and State grants & Local Funds
Environmental Program	Various Port Properties	\$1,500,000	Federal and State grants & Local Funds
General Projects	Various Properties	\$900,000	Local funds and third party reimbursements
Cascade Pole Groundwater Treatment Plant	Cascade Pole Site, Port Peninsula	\$500,000	Federal and State grants and local funds
Port of Olympia Total		\$9,900,000	
Intercity Transit			
Facility expansion, enhancement, access, maintenance, equipment	Service District	\$65,451,400	Secured and Estimated Federal Funding Sources
Intercity Transit Total		\$65,451,400	
Public Utility District #1			
Multiple Water System Upgrades and Facility Replacements	Unincorporated Thurston County	\$675,000	Capital Project Fund
Lew's 81 st Consolidation of Class B Water System into a Class A System	Olympia, WA		Completed
Total Public Utility District #1		\$675,000	

Note: Some facilities of public entities are undergoing updates of their CFPs at the time of publication of this draft. The numbers and/or projects included in these tables may be updated based on information submitted to the County by these entities.